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The use of empirically supported treatment components for trauma exposure: The role of therapist training and characteristics

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The use of empirically supported treatment components for trauma exposure:

The role of therapist training and characteristics

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The student author, whose presentation of the scholarship herein was approved by the program of study committee, is solely responsible for the content of this dissertation. The Graduate College will ensure this dissertation is globally accessible and will not permit alterations after a degree is conferred.

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DEDICATION

This dissertation is dedicated to my hero and biggest fan, my mom, Lorraine Neill. Her unending love and support is the only reason this work was possible. Thank you for helping me make my dreams come true.

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NOMENCLATURE

CBT	Cognitive Behavioral Therapy
EMDR	Eye Movement Desensitization and Reprocessing
EST	Empirically-Supported Treatment
PTSD	Posttraumatic Stress Disorder

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ABSTRACT

Traumatic events, or exposure to actual or threatened death, serious injury, or sexual violence, are unfortunately part of many people's lives. Exposure to traumatic events can lead to life-disrupting consequences for children and adults including mental health disorders such as depression, anxiety, and posttraumatic stress disorder (PTSD). PTSD is one of the most common negative consequences of trauma exposure (Bradley, Greene, Russ, Dutra, & Westen, 2005; Cohen, Mannarino, & Deblinger, 2006). Fortunately, treatments for PTSD are effective, and a few have been identified as "probably efficacious" (Chambless & Hollon, 1998). Eye Movement Desensitization and Reprocessing (EMDR) and Cognitive Behavior Therapy (CBT) were among the treatments identified as probably efficacious for the treatment of PTSD in adults and children and are considered empirically-supported treatments (ESTs). However, there is a disconnect between how we study treatments such as CBT and EMDR in controlled research environments and how the treatments are actually used in community practitioners' offices. The efficacy of ESTs when used in parts and pieces is unknown. Some researchers have begun to identify the most successful and commonly used *components* of treatments. However, there is a need for theory and data to understand the components of empirically supported treatments that are in fact frequently used by community therapists and the therapist characteristics such as training, background, and personality factors, that may predict their use.

The current study therefore focused on *components* of the ESTs CBT and EMDR, as I investigated what individual parts and pieces of the treatments are being used in community settings and to attempt to understand why certain techniques are employed to a greater or lesser extent in practice. To accomplish this, I surveyed 346 community therapists who were primarily female (84.07%) and white (86.98%), with a mean age of 44.59 years. Therapists in the study

were trained in the ESTs CBT and EMDR, with 272 participants (78.61%) trained in CBT and 135 participants (39.02%) trained in EMDR.

The Therapists' Experiences with Empirically Supported Treatment Components Questionnaire (EST-Q) was created for this study. Specifically, the EST-Q asks therapists to rate how often they use the 32 different EST components. This questionnaire allowed me to examine the frequency of the use of these components. I hypothesized that 1) items on the EST-Q would load onto at least two factors: one with mainly CBT techniques and one with EMDR techniques (there may also be a factor with items crossing the two techniques). In fact, four subscales named CBT, EMDR, Both (a factor containing items that are representative of both CBT and EMDR modalities), and Exposure (a factor for items relating to exposure sessions that should be used in TF-CBT) emerged.

Next, 2) I hypothesized that EMDR therapists would use EMDR techniques at a higher frequency than CBT therapists. There was a significant main effect of the EST-Q subscales, such that if we ignore the type of therapist the rating came from, the ratings of the four EST-Q subscales significantly differed. There was also a significant between-subjects effect of therapist type, such that if we ignore the EST-Q subscale rating, different types of therapists (CBT, EMDR, both, and neither) gave different ratings. There was also a significant interaction between the type of therapist and EST-Q subscale, suggesting that the profile of ratings across different types of therapists was different for different EST-Q subscales. EMDR therapists did in fact have higher mean scores on their EMDR subscale than CBT therapists had on their CBT subscale [$t(194) = 3.937$, $p < .001$]. Additionally, therapists who reported being trained in "Both" CBT and EMDR, had significantly higher mean scores on the EMDR subscale than the CBT subscale [$t(208) = 6.583$, $p < .001$], indicating that therapists trained in both CBT and EMDR

were more likely to endorse using more EMDR treatment elements more often than CBT treatment elements.

In addition to the above hypotheses, this dissertation research also aimed to add descriptive information about the use of various EST techniques and about therapists' use of the components of CBT and EMDR. For example, psychoeducation about trauma, or providing "the client information about traumatic experiences, trauma reactions, symptoms, and trauma reminders," was the most commonly endorsed empirically supported treatment element.

Finally, in order to delve deeper into these quantitative findings, qualitative interviews were conducted with a small sample (n = 10) of practicing community therapists. Interview questions were framed around the research question, "What are the experiences of therapists who use components of the empirically-supported treatments Eye Movement Desensitization and Reprocessing (EMDR) and Cognitive Behavioral Therapy (CBT)?" Qualitative data was analyzed using an inductive coding approach, guided by grounded theory. The data gathered in qualitative interviews found 14 a priori themes based on the questions asked to the participants, as well as 14 different emergent themes coded in the data. I briefly discuss themes that help illuminate the quantitative data. A priori themes discussed in this document include: 1) What kind of treatment modalities do you utilize? 2) How do you choose the right treatment modality for each client? and 3) Do you use exposure sessions when treating clients with trauma exposure/PTSD? Emergent themes discussed in this document include: 1) Single incident vs. complex trauma [and/or Big T (Trauma) vs. Little t (trauma)], 2) EMDR vs. exposure sessions/therapy, and very brief discussions of 3) EMDR vs. CBT, 4) Money commitment in EMDR, and 5) Thought EMDR sounded "crazy."

Implications, limitations, and future directions of this research are also discussed.

CHAPTER 1. INTRODUCTION

Traumatic events, or exposure to actual or threatened death, serious injury, or sexual violence, are unfortunately part of many people's lives. Events such as car accidents, serious injuries, community violence, domestic violence, sexual assault, abuse and neglect, war or terrorism, and natural or manmade disasters are all examples of events that people may be exposed to in their lifetime. Studies estimate that up to 70% of people may be exposed to a traumatic event in their lifetime (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). Exposure to traumatic events can lead to life-disrupting consequences for children and adults including poor school performance, behavioral problems, strains on interpersonal relationships, job loss or prolonged unemployment, lower income, a higher risk for suicidal ideation and attempts, substance use, and mental health disorders such as depression, anxiety, and posttraumatic stress disorder (PTSD).

Posttraumatic stress disorder (PTSD) is one of the most common negative consequences of trauma exposure (Bradley et al., 2005; Cohen et al., 2006). Fortunately, treatments for PTSD are effective, and a few have been identified as "probably efficacious" (Chambless & Hollon, 1998). [According to Chambless and Hollon (1998), "probably efficacious" treatments have been manualized and examined in multiple randomized controlled studies using a wait list or placebo control group for comparison.]

Currently, Cognitive Behavioral Therapy (CBT) with a trauma focus (including exposure sessions) and Eye Movement Desensitization and Reprocessing (EMDR) have the most research evidence for the treatment of PTSD in children and adults (Foa, Keane, Friedman, & Cohen, 2009). Chambless and Hollon (1998) found only a handful of treatments that were considered "probably efficacious" for the treatment of PTSD; EMDR and CBT were among them (see also

Silverman et al., 2008). However, extant research also shows that there is a disconnect between how we study treatments such as CBT and EMDR in controlled research environments and how the treatments are actually used in community practitioners' offices (Herschell, Kolko, Baumann, & Davis, 2010). There is a need for theory and data to understand the components of empirically supported treatments that are in fact frequently used by community therapists and the therapist characteristics such as training, background, and personality factors, that may predict their use.

In the following section (Chapter 2. Trauma and PTSD), I define and briefly review information about traumatic event prevalence and potential consequences of trauma exposure as well as expand more specifically on posttraumatic stress disorder (PTSD). Some researchers have begun to identify the most successful and commonly used *components* of treatments, and I review their research next (Chapter 3. Effective Treatments for PTSD). Therefore, in chapter three, I identify what the literature indicates are the most effective components of the treatments Cognitive Behavioral Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR). I also identify CBT and EMDR treatment components that are unique to each treatment and the components common to both treatments, along with the evidence for their efficacy. In Chapter 4 (Failure to Use Empirically Supported Treatments), I review the literature on what therapists are currently doing in practice with regard to empirically-supported treatments (EST's) and specifically how CBT with exposure sessions, appears underutilized. This section also explores how EST components generally, and exposure therapy sessions specifically, are underutilized in practice. In Chapter 5 (Therapist Characteristics) I review concepts and theory relating to personality, self-efficacy, and anxiety of clinicians to develop a theory of clinician factors to predict why therapists choose different therapies or treatment strategies for clients. In Chapter 6 (Summary and Hypotheses) I summarize the previous sections, highlighting gaps in

knowledge and lay out the hypotheses with summaries of the empirical and/or theoretical rationale. I focus on the *components* of ESTs, as I investigate what individual parts and pieces of the treatments are being used in community settings. In Chapter 7 (Method) I describe the methods used in this study and in Chapter 8 (Results) present the quantitative findings of this dissertation research. Chapter 9 (Qualitative Interviews) describes the method used in the qualitative interview portion of this dissertation, while Chapter 10 (Qualitative Interview Results) presents the findings. Finally, in Chapter 11 (Discussion) I review the findings in the context of previous research and summarize their contribution to the extant knowledge base.

CHAPTER 2. TRAUMA AND PTSD

Traumatic events are an unfortunate part of many people's lives. Events such as car accidents, serious injuries, community violence, domestic violence, sexual assault, abuse and neglect, war or terrorism, and natural or manmade disasters are all examples of events that people may be exposed to in their lifetime. The American Psychiatric Association's (APA; 2013) Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5) defines trauma as exposure to actual or threatened death, serious injury, or sexual violence. This trauma may happen in one of several ways including directly experiencing, witnessing, or learning that an event has happened to a loved one, or repeated or extreme exposure to adverse details of traumatic events (e.g., first responders; (American Psychiatric Association, 2013). The DSM-5 offers a non-inclusive list of traumatic events, such as exposure to war as a military combatant or a civilian, threatened or actual physical assault or sexual violence, being kidnapped or taken hostage, torture, natural or manmade disasters, and automobile accidents (American Psychiatric Association, 2013).

Estimates on the prevalence of trauma experiences vary. General trauma exposure is difficult to estimate because many instances of trauma, such as physical or sexual abuse, happen in secret and may not be disclosed until well after the event has occurred (Cohen et al., 2006). Many times, trauma exposures are never reported or treated. There has been an effort by researchers at Harvard University to understand trauma not only throughout the United States, but also around the world. Working in more than 26 countries, Ronald Kessler and colleagues are training lay people to administer interviews and get a better understanding of trauma, as well as other mental health diagnoses, throughout the world (Kessler, 2016b). Recent work with a large (34,676 respondents), multi-national sample, found that participants reported experiencing

an average of 4.5 traumatic events in their lifetime, while 70% of individuals reported experiencing at least one (Liu et al., 2017). The most common traumatic experiences are unexpected death of a loved one and direct exposure to death or serious injury (Liu et al., 2017).

Exposure to traumatic events can lead to life-disrupting consequences for children and adults. Among children, exposure to a traumatic event may lead to poor school performance, acting out, other disruptive behavioral problems, substance use/abuse, and mental health disorders such as depression, anxiety, and posttraumatic stress disorder (PTSD) (Cohen et al., 2006). Among adults, strains on interpersonal relationships and marriages, job loss or unemployment, reduced income, substance abuse, a higher risk for suicidal ideation and attempts, and the development of mental health disorders, such as PTSD, are also prevalent after exposure to a traumatic event (APA, 2013). While a person's response to trauma can be affected by many factors, PTSD is one of the most studied consequences of trauma exposure (Cohen et al., 2006).

According to the DSM-5, PTSD is characterized by the presence of symptoms in four categories *after* experiencing a traumatic event: intrusion symptoms (e.g. intrusive memories, distressing dreams), avoidance of stimuli (e.g. of distressing memories, feelings, external reminders), negative alterations in cognitions and mood (e.g. negative beliefs, inability to experience positive emotions), and alterations in arousal and reactivity (hypervigilance, exaggerated startle response) (APA, 2013). Additionally, the disturbance must persist for one month, cause clinically significant impairment in social, occupational, or other areas of functioning, and must not be attributable to effects of a medication or other substance (APA, 2013).

In the aforementioned multi-national study, of individuals who experienced one random traumatic event, 4% of the sample developed PTSD (Liu et al., 2017). However, the authors caution that this might be an underestimate. The actual rate of developing PTSD may be higher because many participants in the sample were older and being asked to recall events and symptoms from many years prior (Liu et al., 2017). This retrospective study is a common study design and a problem with trauma prevalence studies. The most common traumatic experiences associated with developing PTSD were rape, kidnapping, and other sexual assaults (Liu et al., 2017). This is consistent with other findings that interpersonal violence is most associated with developing PTSD after a traumatic experience (Liu et al., 2017; White et al., 2015). Being a relief worker in a war zone was the only traumatic experience not associated with developing PTSD (Liu et al., 2017).

In the United States, the APA (2013) estimates that the projected lifetime risk for PTSD is 8.7%, meaning that PTSD will affect more that 28 million Americans in their lifetime. Data from the National Comorbidity Study found that women were twice as likely as men to experience PTSD in their lifetime (Kessler et al., 1995). Among women, the most common types of traumas associated with developing PTSD were rape and other sexual assault; for men the most common were combat exposure and witnessing someone being badly injured or killed (Kessler et al., 1995). They found that for both men and women, the trauma experience most likely to lead to PTSD was rape, with 65% of men and 45.9% of women reporting this as their most upsetting trauma experience (Kessler et al., 1995). Combat experience and experiencing childhood abuse and neglect were also strongly linked to PTSD diagnosis (Kessler et al., 1995).

PTSD and other symptoms of traumatic event exposure are unlikely to remit unless treated. Even still, some individuals who receive treatment do not experience complete relief

from symptoms (Kessler, 2016a; Kessler et al., 1995). PTSD is highly comorbid with other DSM disorders (88.3% of men and 79% of women had a comorbid disorder at some point in their lives), and often persistent, in that one third of individuals do not recover after many years (Kessler et al., 1995). The most common comorbid disorders are depression, anxiety, and substance abuse, which may be in part because some of the symptoms of these disorders overlap with symptoms of PTSD (Foa et al., 2009). In terms of the persistence of PTSD, one study found that the median time to remission was 36 months for those who sought treatment, and 64 months for those who did not seek treatment (Kessler et al., 1995).

While about two-thirds of people do recover from their PTSD symptoms, the finding that one-third of people did not recover after many years is particularly concerning, as it was found to be true not only in the sample of people who did not receive treatment, but also in the sample of those who *did* receive treatment. In other words, while treatment works, not all treatment works for all individuals. Many factors may contribute to this finding. Kessler has found evidence for this in his extensive study of the topic, and also states that not all treatments work for all people. He has found that clinical treatment "dropouts" may actually be treatment "switchers" who are finding symptom relief in another type of therapy or with a different therapist (Kessler, 2016a). Many patients interviewed reported trying three or four providers before finding the right person to help them (Kessler, 2016a). Some researchers have begun to identify the most successful and commonly used *components* of treatments. However, the efficacy of ESTs when used in parts and pieces is unknown. The current study will focus on *components* of EST's, as I investigate what individual parts and pieces of the treatments are being used in community settings. A better connection between research and practice that would also be accessible to individuals seeking

treatment, such as a guide for trauma survivors to find a type of therapy, treatment components, or a therapist that will work for them, is needed.

Summary

Experiencing a traumatic event is common for both children and adults in the United States and around the world. Traumatic experiences lead to many adverse consequences, but one of the most studied is PTSD (Cohen et al., 2006). Fortunately, there are effective and empirically supported treatments for PTSD. However, it is also true that some people do not recover even with treatment. To remedy this, some researchers have begun to identify the most successfully used *components* of treatments. However, the efficacy of ESTs when used in parts and pieces is unknown. The next section examines the two that have the most evidence for their efficacy.

CHAPTER 3. EFFECTIVE TREATMENTS FOR PTSD

This chapter details two effective treatments for PTSD, Cognitive Behavioral Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR), and identifies their treatment components. An empirically supported treatment (EST) refers to psychological interventions that have been scientifically evaluated, shown to be efficacious for a certain disorder or problem in randomized controlled clinical trials, and satisfy the criteria outlined in Chambless and Hollon (American Psychological Association, 2006). While other terms such as evidence-based practice may be more inclusive, this paper will focus on and use the term "empirically-supported treatment" (EST) since both CBT and EMDR are in fact, EST's for PTSD. The current study will also focus on *components* of EST's and investigate what individual parts and pieces of the treatments are being used in community settings.

Extant research has clearly established that CBT with exposure therapy and EMDR are the most effective treatments for PTSD (Cook, Schnurr, & Foa, 2004; Foa et al., 2009; Rothbaum, Meadows, Resick, & Foy, 2000). Although many studies have illustrated the efficacy of these treatment modalities in clinical settings with carefully selected participants and a high degree of treatment fidelity, this is often not the way therapists and clients are in community practice (Chorpita, 2002; Herschell et al., 2010). The question remains, what are clinicians in community settings actually doing in their practice? Are they using empirically supported treatments, just some components of those treatments, or are they using any treatment manuals? Garland and colleagues (2010) suggest that the place to start is to find out exactly what is happening in "usual care" in community settings. Surprisingly, this topic has received little attention over the years (Garland et al., 2010). In a meta-analysis of 32 studies that directly compared EST's to usual care, Weisz, Jensen-Doss, and Hawley (2006) found that EST's were

superior in treating mental illness. However, when minority youth and youth with a high level of symptom severity were included, EST superiority was not reduced (Weisz et al., 2006).

The term "efficacy" usually describes an intervention that produces effects in a controlled research study (Barlow, 1996). In comparison, the term "effectiveness" refers to the applicability and feasibility of the intervention in a community setting, or where the intervention is delivered (Barlow, 1996). The word "effectiveness" is also used to describe the generalizability of an intervention to communities with already established efficacy. Currently, we know that both CBT and EMDR are efficacious – they have reduced symptoms in controlled research studies. However, more information is needed about their effectiveness in community settings. Silverman and colleagues (2008) conducted a meta-analysis of current literature on the treatment of PTSD in children and adolescents and found that CBT is efficacious in treating PTSD in children and adolescents. More recently, a review of CBT studies for children and adolescents found that across 10 studies that included randomized trials, CBT was highly effective and reduced PTSD symptoms in children and adolescents (Ramirez de Arellano et al., 2014). However, more studies are still needed to ensure the treatment's efficacy with diverse samples in terms of race/ethnicity, type of trauma experienced, and disability (Ramirez de Arellano et al., 2014).

The International Society for Traumatic Stress Studies (ISTSS) evaluated interventions and established treatment guidelines specific to PTSD. ISTSS developed a standardized rating system for each treatment modality to summarize the strength of evidence for the treatment's efficacy (Foa et al., 2009). The ratings, adapted from the Agency for Healthcare Research and Quality (AHRQ) rating system, range from "Level A" (the highest rating) to "Level F" (the lowest rating), with Level A indicating that the evidence for the treatment is based on randomized, well-controlled, clinical trials with individuals with PTSD (Foa et al., 2009).

Cognitive Behavioral Therapy (CBT) with exposure sessions consistently has the most research conducted, evidence for its efficacy, and is considered "Level A" for both adults and children (Foa et al., 2009). Eye Movement Desensitization and Reprocessing (EMDR) is a newer treatment, and is currently considered "Level A" for adults and "Level B" for children, due to a lack of studies conducted with children (Foa et al., 2009). However, since these guidelines were published in 2009, several more studies have been conducted with children. In fall of 2018, ISTSS updated their guidelines and now gives a "strong recommendation," their highest classification, to both CBT and EMDR for the treatment of children with PTSD symptoms (ISTSS, 2018). In their original report, Chambless and Hollon (1998) found only a handful of treatments that were considered "probably efficacious" for the treatment of PTSD – and EMDR was among them (see also) (Silverman et al., 2008). In the years since, evidence and support for EMDR as an efficacious treatment for PTSD has significantly grown (Foa et al., 2009; Gutermann, Schwartzkopff, & Steil, 2017; Pagani et al., 2011; Schubert & Lee, 2009; van der Kolk et al., 2007; Welling, 2012). At present, many studies have been conducted using randomized controlled trials and consistently show that EMDR is as effective, or more effective, in reducing PTSD symptoms than other trauma-focused therapies or medication (Foa et al., 2009; ISTSS, 2018; Schubert & Lee, 2009; van der Kolk et al., 2007).

In line with the increasing evidence of EMDR's efficacy in treating PTSD, it is now included in the practice guidelines of several professional organizations and national mental health services including the American Psychiatric Association (Ursano, et al., 2004), the American Psychological Association (Chambless, et al., 1998), the Department of Veterans Affairs and Department of Defense (2010), and ISTSS (Foa et al., 2009; ISTSS, 2018). In these practice guidelines, and in several meta-analyses, EMDR has been shown to achieve treatment

effects that are equivalent to and as long lasting as those of older, even more researched therapies such as CBT (Oren & Solomon, 2012) and pharmacological interventions (van der Kolk et al., 2007).

In the following sections, I will briefly review more information about, and evidence for the efficacy of, the components of CBT, including exposure therapy, and the components of EMDR for the treatment of PTSD in children, adolescents, and adults.

Cognitive Behavioral Therapy

Cognitive Behavioral Therapy (CBT) has long been considered the "gold standard" in the treatment of PTSD (Najavits, 2015). However, the operational definition of CBT (i.e. "what *is* CBT?") varies, especially for adults (Foa et al., 2009). For the purposes of this paper, I will concentrate on a unifying theme: the common goal of CBT therapies is "to modify a client's way of thinking so that a change in behavior and emotions can occur" (Association for Behavioral and Cognitive Therapies, 2017a). In CBT, individuals and therapists work together to explore the ways a person's thoughts, emotions, and behaviors are connected (Association for Behavioral and Cognitive Therapies, 2017b). This is the underlying mechanism of action in CBT – changes in negative thoughts and beliefs creating changes in behaviors and feelings, as well as a focus on how some thoughts and behaviors may inadvertently reward and maintain, or increase, those undesired thoughts and behaviors (Association for Behavioral and Cognitive Therapies, 2017b).

Generally, CBT consists of 8 – 12 weeks of individual therapy sessions that last approximately 60 – 90 minutes once or twice a week (Foa et al., 2009). The ISTSS guidelines acknowledge that some individuals will need fewer sessions, and some may need a few more, especially in cases with more complex trauma histories (Foa et al., 2009). CBT sessions first focus on psychoeducation, then may incorporate monitoring tasks such as keeping a thought record and challenging automatic thoughts, ideas, or beliefs to see if they are actually true. CBT

therapies will also help clients identify negative beliefs and schemas and work to change those automatic thoughts due to a negative belief or schema. In between therapy sessions, individuals are asked to complete homework assignments (Foa et al., 2009). There are many different treatment manuals and names given to therapies that fall into the CBT category (Foa et al., 2009). Here, I consider adult and youth populations separately due to the developmental differences in PTSD between the populations, as well as the treatment considerations mentioned.

For adults, the ISTSS guidelines consider treatments such as Stress Inoculation Training (SIT), Cognitive Processing Therapy (CPT), Cognitive Therapy (CT), Exposure Therapy, Systematic Desensitization, Dialectical Behavioral Therapy (DBT), and Acceptance and Commitment Therapy (ACT) under the CBT umbrella (Foa et al., 2009). These treatments vary in their procedures, and more widely in the evidence for their efficacy (Foa et al., 2009). Exposure therapy is a treatment that helps individuals confront, or *expose* themselves to, thoughts and low-risk stimuli that they fear or avoid (Foa et al., 2009). When treating individuals with PTSD, both imaginal exposure of the trauma memory and *in vivo* (in-person) exposure to reminders of the trauma or triggers of the trauma-related fear or avoidance, can be utilized (Foa et al., 2009). Generally, exposure therapy begins with developing an anxiety hierarchy in which the client and therapist describe progressively more anxiety-provoking triggers (Foa et al., 2009). Treatment either begins with the highest rated item in the hierarchy, or with a moderately rated item (Foa et al., 2009). The mechanism of change in exposure therapy is based on Mowrer's (1960) learning and behavior theory. That is, by continuously exposing a person to a frightening stimulus, their feelings of anxiety about the stimulus decrease, and, consequently, avoidance behaviors that are maintaining the fear response decrease as well (as cited in) (Foa et al., 2009).

Exposure therapy has the most evidence for its efficacy in treating individuals with PTSD than any other type of therapy, with 22 Level A (randomized) studies, and eight non-randomized Level B studies supporting its efficacy as of 2009 (Foa et al., 2009). The evidence is strongest for combining imaginal and *in vivo* exposure together in treatment, with 11 Level A studies and four Level B studies supporting this approach (Foa et al., 2009). Therefore, the ISTSS guidelines for treating PTSD recommend that CBT, or another similar program (such as CT, CPT, or SIT), that include exposure therapy (imaginal and *in viv*o exposure), should be the first line of treatment for individuals with chronic PTSD (Foa et al., 2009).

While some researchers characterize their studies with youth as CBT, many youth PTSD researchers use a program called Trauma Focused – Cognitive Behavioral Therapy (TF-CBT). TF-CBT incorporates trauma-sensitive interventions, such as involving parents in children's treatment, with already established CBT principles. Although many of the original researchers who worked on TF-CBT interventions specifically studied children who had been sexually abused, TF-CBT has also been shown to be effective for children who have experienced many different types of trauma and combinations of trauma. Though developed to treat PTSD, the therapy recognizes that survivors of trauma experience symptoms of anxiety and depression, in addition to trauma-specific symptoms such as self-blame, safety concerns, and difficulty regaining trust in others and the world in general (Cohen, Deblinger, & Mannarino, 2004).

In accordance with a trauma-informed and strengths-based perspective, TF-CBT also works to help children fit the trauma(s) into their lives in such a way that they do not identify themselves as a "victim" (Cohen, Deblinger, & Mannarino, 2004). Specifically, the main components of TF-CBT are 1) psychoeducation about trauma and PTSD; 2) affective modulation skills; 3) stress-management skills tailored to the individual receiving them; 4) an introduction to

the cognitive triad – beginning to understand the relationships between thoughts, feelings, and behaviors; 5) creating a trauma narrative, wherein children describe increasingly distressing details of their trauma as in a gradual exposure intervention; 6) cognitive processing; 7) body safety skills; and 8) a parental treatment component (Cohen, Deblinger, & Mannarino, 2004). Findings from at least a dozen studies have identified TF-CBT as the superior treatment modality in comparison to other common treatments for trauma exposure in youth, such as nondirective play therapy, supportive therapies, and waitlist control groups (Cohen, Deblinger, Mannarino, & Steer, 2004; Cohen & Mannarino, 1996a, 1996b, 1997; Deblinger, Lippmann, & Steer, 1996; Deblinger, Stauffer, & Steer, 2001; Deblinger, Steer, & Lippmann, 1999; King et al., 2000; Pollio, McLean, Behl, & Deblinger, 2014). As these studies show, TF-CBT currently has the most empirical evidence supporting its efficacy in treating PTSD in children. This is due not only to its superiority to other treatment modalities, but also to the successful treatment gains shown in numerous studies (Cohen & Mannarino, 1996a, 1997; Deblinger et al., 1996, 2001, 1999; King et al., 2000; Scheeringa, Weems, Cohen, Amaya-Jackson, & Guthrie, 2011). For the purposes of this paper, "TF-CBT" will now be referred to as "CBT."

Chorpita and Daleiden have begun the important work of identifying the most successful CBT components in randomized clinical trials (RCT) for treating children for traumatic stress. They found that exposure, cognitive elements, psycho-education for the child, relaxation techniques, and psycho-education for the parent were among the most common practice elements for traumatic stress in children in the 11 successful RCT treatments examined (Chorpita & Daleiden, 2009). Therefore, Chorpita and Daleiden (2009) suggest that practitioners treating children with traumatic stress may want to pay particular attention to incorporating these practice elements.

Eye Movement Desensitization and Reprocessing

Eye Movement Desensitization and Reprocessing (EMDR) was discovered by Francine Shapiro in 1987 when she first recognized the effects of eye movements while thinking about disturbing memories (Oren & Solomon, 2012). There are eight phases to the EMDR treatment approach – client history, preparation, assessment, desensitization, installation, body scan, closure, and reevaluation (Shapiro, 2001). After completing phase 1 (client history/treatment planning) and phase 2 (preparation/stabilization) EMDR also uses a "three-pronged approach" to look at past memories, present experiences, and future templates in phases 3 through 6 (Shapiro, 2001). The client first processes any past experiences that are contributing to the current problem(s), then processes present situations that trigger maladaptive responses (both phases 3 and 4 – assessment and desensitization), and finally imagine future templates with the desired adaptive behaviors and positive beliefs (phase 5 – installation) (Shapiro, 2001).

Shapiro (2001) is clear when describing EMDR treatments and its components, that "EMDR is a complex approach with a variety of components that are deemed necessary for full effectiveness," (p. 28). Each of the phases, or components, that make up EMDR may take several sessions to move through, but the treatment itself is highly standardized so that all therapists use all parts and pieces and use the components in the same way (Oren & Solomon, 2012). However, one study found that participants had a decrease in physiological arousal, specifically lowered heart rate and skin conductance, with just one session of EMDR (Aubert-Khalfa, Roques, & Blin, 2008). One of EMDR's advantages is that it can be used in either a focused, short-term treatment capacity, as well as a long-term, broad form of therapy (Oren & Solomon, 2012). The EMDR treatment approach is also thought to be integrative as it incorporates elements of psychodynamic, cognitive, experiential, and behavioral orientations, while giving the body a central place in the therapy (Oren & Solomon, 2012; Shapiro, 2001).

EMDR is guided by the Adaptive Information Processing (AIP) model (Shapiro, 2001; Solomon & Shapiro, 2008). Like other learning theories, the AIP model says that when we learn new information, it is stored in pre-existing memory networks that form the bases of our perceptions, attitudes, and behaviors (Solomon & Shapiro, 2008). In the AIP model, a person's incoming sensory perceptions of their current situation are linked with associated memory networks, which integrate and connect related, previously-stored information (Solomon & Shapiro, 2008). However, problems occur when this new experience is not adequately processed and put in its proper neural network. Shapiro's AIP model (1995, 2001) is based on the assumption that a particularly upsetting incident may be improperly stored and unable to connect to the correct memory network containing adaptive information. If dysfunctionally stored memories lead to undesired and maladaptive responses, then EMDR works to access those memories, process them using standardized protocols (including bilateral stimulation such as eye movements, or any visual, tactile, or auditory stimuli presented in rhythmic left-right patterned movements), then facilitate links to adaptive memory networks and, consequently, an adaptive behavioral and emotional response (Shapiro, 2001). One mechanism of action the AIP model proposes is that the disturbing event is no longer stored incorrectly in isolation, but that it then becomes assimilated in an adaptive, existing memory network (Högberg, Nardo, Hällström, & Pagani, 2011; Solomon & Shapiro, 2008).

The components of the AIP model in many ways reflect concepts in a mechanism familiar to neuroscientists known as memory reconsolidation. That is, when memories are recalled, they become labile and are able to be changed or disrupted before they consolidate into long-term memory again (Dudai, 2004; Nader, Schafe, & Le Doux, 2000; Weems et al., 2014). Thus, recalling the traumatic memory in EMDR may allow the memories to become malleable

again and reconsolidate properly into the adaptive memory network. Although EMDR is a well-researched, empirically-supported treatment for trauma, the underlying mechanism of change is still not fully understood. Current theories that the eye movements may interrupt working memory, or that they cause a lowering of physiological arousal, such as during REM sleep, are based on limited research (Oren & Solomon, 2012). Additionally, many therapists do not currently use actual eye movements, but instead use bilateral stimulation in the form of "buzzers" – a tactile device that clients hold in each hand and vibrations alternate, or alternating lights (Shapiro, 2001).

As the Chorpita and Daleiden (2009) study attempted to identify the most successful treatment components in randomized clinical trials (RCT's) treating traumatic stress in children, some EMDR studies were included. Eye movement/tapping was one of the 14 codes that was removed early in the study process, as it occurred less than three times across all 232 treatment groups examined (Chorpita & Daleiden, 2009). However, this study was published in 2009 and there were a limited number of studies published using EMDR to treat traumatic stress in children at that time. Therefore, the most efficacious treatment components of EMDR were not included in the Chorpita and Daleiden study.

In the current study, 32 different empirically-supported treatment components were presented to therapist participants. Participants answered how often they used each of the components presented with clients in their practice. Table 1 shows these 32 treatment components, listed by CBT and EMDR components, with two components common to both treatment modalities.

Table 1. *The 32 EST Components of the Empirically Supported Treatment Questionnaire*

	CBT	**EMDR**
1.	Use of a standard measure prior to session to assess client's level of symptoms for the day's session	Identify processing targets from positive and negative events in client's life (i.e. first or worst traumatic event)
2.	Agenda setting – articulate & implement a specific agenda for session, identify other issues	Have the client imagine a container to hold memories/thoughts when not working through them
3.	Review with client previous homework – praise efforts and troubleshoot obstacles	Provide client an explanation of Eye Movement Desensitization and Reprocessing
4.	Utilize homework and other educational materials – informational handouts, worksheets, etc. with client	Help client establish a calm/safe place in their mind to "go" when traumatic memories are too much
5.	Deep breathing exercises or breathing training	Establish a stop signal for when traumatic memories are too much to continue processing/end of session
6.	Use of guided imagery/imaginal exposure	Have client do body scan (i.e. "Where do you feel the trauma in your body?")
7.	Work on emotion knowledge/affect identification and emotion regulation/modulation skills	Elicit image of the traumatic event, negative belief currently held, desired positive belief, current emotion(s), and physical sensation (body location)
8.	Use of cognitive restructuring with client (thought-feeling model, connect negative feelings to thoughts, challenge thoughts, generate alternative thought, practice alternative thoughts)	Use of Validity of Positive Cognition ("VOC") "How true do those words ____feel to you now?"
9.	Assign thought record or daily diary to client (client to record thoughts, feelings/emotions, behaviors/actions)	Use of Subjective Units of Disturbance Scale ("SUDS") "How disturbing does it feel to you now?"
10.	Help client develop a trauma narrative	Bilateral stimulation with negative cognition and traumatic event (e.g. eye movements, tactile or visual stimulation, etc.)
11.	I work with my clients to create a graded exposure hierarchy	Bilateral stimulation with positive cognition (e.g. eye movements, tactile or visual stimulation, etc.)
12.	I always work through the entire graded exposure hierarchy	Use "Cognitive Interweave" to open blocked processing by elicitation of more adaptive information

Table 1. *Continued*

	CBT	EMDR
13	Use of in-vivo exposure	Explain that processing of trauma memories may continue after the session
14	Address personal safety skills and assertive communication	Reevaluation – Check to make sure the client's positive results have been maintained
15	Increase awareness of problem-solving skills and/or social skills	Psychoeducation – provide the client information about traumatic experiences, trauma reactions, symptoms, and trauma reminders *
16	Use of homework assigning (e.g. develop homework assignment, collaborate with client, make specific plan, troubleshoot obstacles)	Provide progressive muscle relaxation (or provide other progressive relaxation skills) *

* Denotes items that were common to both CBT and EMDR

Summary

There are efficacious treatments for PTSD in both children and adult populations. In order to understand what is efficacious, the field classifies treatments in several ways. "Probably efficacious" treatments for mental illness have been manualized and examined in replicated studies using a wait list or placebo control group for comparison (Chambless & Hollon, 1998). The trauma experts at ISTSS categorize treatments by level, with Level A indicating that the evidence for the treatment is based on randomized, well-controlled, clinical trials with individuals with PTSD (Foa et al., 2009). Cognitive Behavioral Therapy (CBT) works primarily by helping individuals monitor and change their negative beliefs and thoughts into more positive beliefs and thoughts, which in turn changes their feelings, behaviors, and future thoughts (Foa et al., 2009). CBT for PTSD should include exposure sessions (Foa et al., 2009). Exposure sessions, or exposure therapy, works by continuously exposing a person to a frightening stimulus so that their feelings of anxiety about the stimulus decrease, and their avoidance behaviors that are maintaining the fear response decrease (Foa et al., 2009). CBT has been evaluated as

"probably efficacious" for both children and adults, and categorized as a "Level A" treatment for adults and children by ISTSS (Foa et al., 2009; Silverman et al., 2008). Eye Movement Desensitization and Reprocessing (EMDR) may work by helping to move dysfunctionally stored into an adaptive memory network, and reducing the salience of the trauma memories (Solomon & Shapiro, 2008). EMDR has been evaluated as "probably efficacious" for both children and adults, and "strongly recommended," the highest classification, for EMDR for the treatment of children with PTSD symptoms (Foa et al., 2009; ISTSS, 2018; Schubert & Lee, 2009; Silverman et al., 2008; van der Kolk et al., 2007). In the next chapter, I will explore these treatments further, as I define and describe "empirically-supported treatments" and the need to use them not only in clinical trials, but in community practice.

CHAPTER 4. FAILURE TO USE EMPIRICALLY-SUPPORTED TREATMENTS

While we know CBT and EMDR are efficacious, how *effective* they are in treating PTSD is less well understood. In a review of the literature, Herschell, Kolko, Baumann, and Davis (2010) found that lack of EST use in *community practice settings* may be related to a lack of empirical training strategies for therapists. Since many studies have found that the parameters of a *clinical trial* for an EST vary substantially from *real-world practice*, it is not surprising that clients in community trials have worse outcomes than those in clinical trials (Weisz, Krumholz, Santucci, Thomassin, & Ng, 2015). Worryingly, one study found that if youth had PTSD as a diagnosis, they were significantly less likely to receive an EST (Borntrager, Chorpita, Higa-McMillan, Daleiden, & Starace, 2013). However, use of EST's did increase with the child's age (Borntrager et al., 2013), indicating that perhaps there may be some barriers for clinicians to use EST's with younger children.

In a study that used a benchmarking strategy to compare youth treated for depression in a community clinic setting to youth treated for depression with CBT in clinical trials, Weersing and Weisz (2002) found that within the community setting sample, youth who identified as an ethnic minority and those with a low therapy dose were related to worse outcomes (Weersing & Weisz, 2002). When outcomes for Caucasian youth and those receiving longer term therapy were examined independently, youth in the community setting still had worse outcomes than youth in CBT clinical trials (Weersing & Weisz, 2002). This finding shows the discrepancy in quality care for those youth receiving treatment in the community, which is where a majority of youth are treated.

Cook, Schnurr, and Foa (2004) agree with previous research that although we have evidence for effective treatments, they are not easily put into practice; applying research findings

outside of academia in clinical practice is difficult. Cook and colleagues (2004) recommend that simple trainings or continuing education credit courses on exposure therapy are not enough without sufficient follow-up. To combat common reasons why clients may not want to try exposure therapy, as well as why therapists may be hesitant to use it in their practice, Cook and colleagues (2004) suggest solutions to common barriers. These solutions include making sure clients have an understanding of what the therapy is and the high rate of success it has, as well as specific suggestions for training and supervision for therapists worried about their exposure skills (Cook et al., 2004). Like others, Cook and colleagues (2004) suggest that research should not be disseminated to practitioners, but that researchers and practitioners need to be more equal partners with information about treating trauma flowing between both the research and practice areas.

Previous research asking clinicians why they deviate from EST protocols consistently cites the importance of the therapeutic relationship as a priority for clinicians (Addis, Wade, & Hatgis, 1999; Gilbert & Leahy, 2007). However, Waller and Turner (2016) found in a review of the literature that early symptom change actually drives therapeutic alliance, and not the other way around. They argue that therapists' reliance on the power of the therapeutic alliance may be because therapists then have less of a need to learn EST's (Waller & Turner, 2016). If early symptom change drives the therapeutic alliance, it may be wise for clinicians to focus on using EST's early-on in treatment, in order to build an alliance with their clients.

Disconnect Between Research and Practice

Indeed, there is growing evidence to suggest that the disconnect between research and practice may begin as early as graduate training programs. In a national survey of graduate programs in psychiatry, psychology, and social work, Weissman and colleagues (2006) found that while many programs offered electives in both EST and non-EST practice, most *required*

training was non-EST. CBT was the most commonly offered EST and more than 90% of the psychiatry programs surveyed were complying with a new requirement to offer CBT (Weissman et al., 2006). Social work and professional clinical psychology (PsyD) programs educate the largest number of future mental health professionals and place the biggest emphasis on clinical training (Weissman et al., 2006). However, a surprising number of these programs did not require either didactic (61.7%) or clinical supervision (67.3%) in any EST (Weissman et al., 2006).

Weissman and colleagues (2006) argue that this gap between research evidence and clinical practice will remain until it is better addressed at the training level in graduate and professional programs. In a national survey of faculty in programs providing Master of Social Work degrees, Rubin and Parrish (2007) found that the overwhelming majority (73%) had a favorable opinion of EST's. However, there were discrepancies in how clinicians defined EST's and where they looked to determine if a treatment was evidence-based (Rubin & Parrish, 2007). This suggests that more education is needed about EST's, even among educators who may not be familiar with current criteria for evaluating efficacy (Rubin & Parrish, 2007). Proctor and Rosen (2008) agree that the field of social work, specifically, needs to pay more attention to implementing EST's. However, they highlight the problem that research and practice are often separate areas, which need to be better connected (Proctor & Rosen, 2008).

Professional Barriers to Using Empirically Supported Treatments

Once practitioners are out of graduate school and practicing in the community, many competing demands are made on their time, and getting EST's into the hands of clinicians continues be a barrier. Better understanding of how best to disseminate EST's is one key to bridging the gap between research and practice (Addis & Krasnow, 2000; Beidas & Kendall, 2010).

Although EST's exist and are supported by major professional organizations, the majority of clients in treatment do not receive them (Beidas & Kendall, 2010). More and better clinician training on EST's is viewed by many as a key to improving client care (Garland et al., 2010). Lack of time and resources for training, as well as lack of supervision and consultation, are frequently cited as reasons that implementing EST's in community settings does not work (Garland et al., 2010). Barriers to implementing EST's include time constraints, excessive paperwork, and lack of reimbursement for activities related to implementing EST's such as training and supervision (Riemer, Rosof-Williams, & Bickman, 2005). Addis, Wade, and Hatgis (1999) cite several reasons why clinicians are hesitant to use empirically-supported, manualized treatments including effects on the therapeutic relationship, unmet client needs, competence and job satisfaction, treatment credibility, hindering clinician innovation, and the feasibility of manualized treatments. This is a problem for those seeking treatment. While many people would not even choose a restaurant without reading the reviews first, there is not a way for consumers to review therapists to find out success rates or how much a therapist uses EST components until they begin meeting with them (Garland et al., 2010).

One barrier to EST dissemination is proper training of community providers (Beidas & Kendall, 2010). In their review of dissemination and implementation studies, Beidas and Kendall (2010) found that training influences therapist knowledge, attitudes, and perceived behavior. Barlow, Levitt, and Bufka (1999) found that even among treatments that had a lot of empirical support for their efficacy, people who needed the treatments could not access them because they had not been disseminated to therapists properly. There are a variety of barriers to disseminating EST's to community practice professionals (Barlow et al., 1999). These include not having enough faculty in graduate programs certified in certain EST's to train graduate students, a lack

of internship and specialized trainings available, a lack of continuing education requirements about EST's, and a lack of clinical supervision for those wishing to obtain certification in EST's (Barlow et al., 1999). This is further evidence that the lack of EST training that begins in graduate school continues as therapists transition to community positions.

There is evidence that therapists who have a more favorable opinion of ESTs are more likely to use them (Kolko, Cohen, Mannarino, Baumann, & Knudsen, 2009). Bortrager, Chorpita, Higa-McMillan, and Weisz (2009) conducted a study to investigate whether clinicians had a problem with the evidence or the manuals for EST's. They found that after completing training for an EST, therapists' views of EST's were more positive. However, they also found that there was a significant difference in how the therapists felt about the EST's based on *how* they were asked. Therapists who took a survey where the term "manual" was used had significantly less favorable view of EST's compared with therapists who took a survey that deemphasized the word "manual" (Borntrager et al., 2009). The terminology used by researchers may impact community therapists' willingness to use EST manuals or manual components.

Nelson, Steele, and Mize (2006) conducted two focus groups with 19 practitioners who work with children and adolescents in a community setting to better understand their views on EST's. The major themes they gathered from these focus groups were concerns regarding the applicability of some research supporting EST's, such as if research is applicable to their setting in a community-based treatment center (Nelson et al., 2006). These practitioners also expressed that they did not have time to attend training on an EST due to their caseload size and other work constraints (Nelson et al., 2006). Participants also expressed a desire for a greater emphasis on the therapeutic relationship, and the need for flexibility within protocols (Nelson et al., 2006).

These findings from community practitioners echo the more recent suggestions from researchers, that EST protocols need to be more flexible for real-world practice.

Guan and colleagues (2017) recently tried to understand one of the reasons that therapists may not be following EST's – "surprise" life events that come up in session. They found that in a community sample, when an unexpected life event came up in a session, therapists were significantly less likely to deliver the EST (Guan et al., 2017). And when therapists did deliver the EST after a surprise event came up, they were less likely to connect the event to treatment (Guan et al., 2017). This shows that unexpected life events may be one reason that EST's are not always followed in community practice.

In the case of EMDR, training is intensive and can be costly. Programs such as the EMDR Humanitarian Assistance Program (EMDR HAP) have been created to try to reduce the cost and get EMDR into the hands of more clinicians. However, this course requires two separate three-day weekends of training, with time needed for practice in between weekends. The fee for both weekends is $890 and EMDR HAP estimates that is about half the price of privately offered EMDR trainings (EMDR Humanitarian Assistance Programs, 2017). After training, clinicians must then practice EMDR and usually pay for supervision from a certified EMDR consultant in order to obtain their certificate to practice EMDR independently. However, the condensed nature of the training in only six days and over weekends, allows some clinicians the time to complete the training. Additionally, there is only one treatment manual for EMDR – it is uniform, and anyone trained in EMDR will be trained in the same way, no matter where they received their training. Finally, many non-profits and other organizations bring trainings such as EMDR HAP to their employees and pay for the course, others offer reimbursement for training, and many

offer free supervision from EMDR consultants within their own organization or for free or at a low cost with other trainers (EMDR Humanitarian Assistance Programs, 2017).

One study looked specifically at how practicing therapists felt about homework assignments in CBT – a hallmark of the treatment protocol since its inception in the 1970's. Kazantzis, Lampropoulos, and Deane (2005) found that the 827 therapists surveyed used homework assignments with CBT "almost always" (20%) or "often" (48%). Those therapists with a cognitive-behavioral orientation were more likely to feel positive about homework assignments in CBT (Kazantzis et al., 2005). However, the homework assignments of CBT are actually not the most underutilized aspect of the treatment.

Exposure therapy is one of the most empirically supported, yet most under-used, EST's (Farrell, Deacon, Dixon, & Lickel, 2013; Harned, Dimeff, Woodcock, & Contreras, 2013). Researchers and clinicians cite many reasons for this, including exposure carrying a high risk of harm to clients, clients being unable to tolerate exposure, and a number of ethical considerations (Farrell et al., 2013). Since exposure therapy sessions should be part of a CBT protocol for adults and children being treatment for PTSD symptoms, this finding is concerning. This subsection investigates whether the concerns raised are valid or supported in the literature.

Although most CBT manuals for PTSD include exposure sessions, and exposure sessions are an empirically supported treatment for PTSD, research has shown that often therapists outside of a research environment are not using exposure sessions in their practice (Becker, Zayfert, & Anderson, 2004; Borntrager et al., 2013; Cook et al., 2004; Foy et al., 1996). Foy and colleagues (1996) are one of the earliest, and still one of the only groups, to research this topic. They cite several categories of reasons exposure techniques may not be being used in clinical practice including factors related to the client, the therapist, and the treatment environment. From

patient refusal to adverse reactions to the exposure treatment, there are a range of reasons clinicians cited for not using exposure sessions (Foy et al., 1996). Fontana and Rosenhack (1993) found that in a study of 4,000 veterans treated for PTSD at Veterans Affairs outpatient programs, exposure-based therapy was used in less than 20% of cases and was the primary treatment in 1% of cases (Foy et al., 1996). This study also found that the reasons veterans gave for terminating treatment early was for transportation problems (30%) and only 8% of veterans said that they terminated treatment because of the overstimulation of PTSD memories (Foy et al., 1996). Therefore, these clinician-reported concerns may be unfounded.

As noted previously, for adults, there are many different types of CBT manuals. This leads to some confusion and need to identify exactly what aspects of CBT clinicians are using. Borntrager and colleagues (2013) found that exposure sessions were the most common element of EST manuals for traumatic stress, but that they were used in less than a quarter of the usual care cases. Another survey of 331 clinicians (81% who identified as CBT-oriented) who treat children with anxiety diagnoses, found that exposure-based therapy was rarely offered in community settings (Whiteside, Deacon, Benito, & Stewart, 2016). Holding a PhD in psychology and having more positive beliefs about exposure and child resiliency were related to greater use of exposure in practice (Whiteside et al., 2016). Whiteside and colleagues (2016) suggest that this finding may mean that EST dissemination should focus on individual parts of the treatment and on addressing therapists' misconceptions.

In one study of therapists who were new to exposure therapy and training to use it in practice, twelve weeks after the training, therapists reported a high rate of using exposure therapy in practice (87.5%) and demonstrated moderate clinical proficiency (Harned et al., 2013). Using exposure therapy was predicted by therapist degree, self-efficacy, and knowledge (Harned et al.,

2013). Therapist proficiency in exposure therapy was predicted by therapist anxiety sensitivity, attitudes, and knowledge, and organizational and client barriers (Harned et al., 2013). However, taken together, Harned and colleagues (2013) posit that the key barriers to using exposure therapy in practice are therapist factors, and not organizational or client factors. Perhaps community clinicians simply need more training and support for using exposure therapy and exposure sessions for their clients with PTSD.

Waller and Turner (2016) identify "therapist drift" as a reason why some therapists, despite their training and resources, fail to deliver, or adequately deliver an EST. Waller and Turner (2016) found that therapist use of exposure therapy was especially concerning, finding that use of exposure sessions, especially for clients using CBT for PTSD, is rare and when used is not of good quality (Farrell et al., 2013; Hipol & Deacon, 2013). Factors related to therapist drift include the therapists' personalities, emotions, behaviors, knowledge, beliefs, and social milieus such as the context therapists' work in or their quality of supervision (Waller & Turner, 2016). Again, these therapist factors are malleable and with further training and support could be changed so that exposure sessions for clients using CBT for PTSD is more common and when used is of a high quality.

Becker and colleagues (2004) sought to survey licensed clinical psychologists about their use of exposure therapy for PTSD and about their ideas of the perceived barriers of implementation. They specifically set out to investigate how much therapists are using exposure in practice and what influences their decision of whether to use exposure or not. In a sample of 217 practitioners, Becker and colleagues (2004) found that the majority of their sample (69%) had not received any formal training for exposure for PTSD. Only 17% of the sample responded that they currently use exposure to treat PTSD. When asked to rate 20 items that the existing

literature shows might contraindicate using exposure therapy, 37% of the sample endorsed any comorbid diagnosis and 32% endorsed a comorbid anxiety disorder (Becker et al., 2004).

The Becker (2004) study may indicate a lack of understanding of exposure sessions in CBT, as exposure therapy is also an empirically validated treatment for anxiety disorders. Participants were asked to respond to 14 potential negative complications that are known to be associated with exposure sessions for PTSD. The practitioners who responded answered that 87% of them felt increases in arousal were likely, 83% rated re-experiencing symptoms, 76% dissociation, 75% substance abuse, and 75% suicidality (Becker et al., 2004). Participants were also asked to identify factors that might influence their decision to limit their use of exposure sessions. The study found that the three most commonly endorsed factors were limited training, a preference for individualized treatment over manualized therapy, and concern that the patient would decompensate (Becker et al., 2004).

How to Fix It

Chorpita (2002) argues that to remedy this discrepancy between community and clinical trial samples, we should initially test EST manuals with the population for which they are intended. Therefore, if we intend for the manual to be used in clinical practice in a community setting, we should test the manual in a community setting, not a research setting. The Weersing and Weisz (2002) study described above also provides evidence for why it is necessary to develop and test EST's in a community clinic setting.

Chorpita, Daleiden, and Weisz (2005) proposed the "Distillation and Matching Model" as a way to empirically factor intervention literature to come up with "profiles" from evidence-based approaches for use in community practice. These profiles are useful because they can then be matched to clients in community practice based on which problems they want to target, or even the client's demographic factors such as age, gender, or ethnicity (Chorpita et al., 2005).

This model aims to solve several of the current problems in the treatment literature including helping clinicians understand how treatments may be similar and different, guide treatment selection based on client characteristics or needs, as well as possibly create new interventions in the future (Chorpita et al., 2005). Applied, the distillation and matching model can provide a map for clinicians to find the treatment components with evidence for the most favorable treatment outcome, or the components best catered to their client's individual differences.

Chorpita and Daleiden (2009) then applied the Distillation and Matching Model by reviewing successful, randomized clinical trials (RCT's) of treatments for specific psychological disorders in children, including traumatic stress. Forty-one codes were eventually determined from 232 treatments and then were mapped similarly to an exploratory factor analysis (Chorpita & Daleiden, 2009). Though the traumatic stress node was similar to anxiety, the traumatic stress node contained two practice elements not found in anxiety – personal safety skills and insight building (Chorpita & Daleiden, 2009). There was also a greater emphasis on cognitive elements and psychoeducation for the child in the traumatic stress node compared to the anxiety node (Chorpita & Daleiden, 2009). For traumatic stress, they found that exposure (.91), cognitive elements (.91), psychoeducation for the child (.82), followed by relaxation (.64), psychoeducation for the parent (.45), and maintenance/relapse prevention (.45) were the most common practice elements in the 11 treatments examined (Chorpita & Daleiden, 2009). Interestingly, eye movement/tapping and supportive listening were among the fourteen codes that were removed early in the study process due to occurring less than three times across all 232 treatment groups (Chorpita & Daleiden, 2009). Therefore, for treating traumatic stress in children, community clinicians informed of these findings in successful treatments should begin treatment with treatment components such as exposure sessions, cognitive restructuring, learning

relaxation techniques, and providing psychoeducation about trauma to both children and their parents. However, at the time of publication (2009) there were not enough studies of EMDR in children to identify the most successful EMDR treatment components. Additionally, "supportive listening" is often used to build therapeutic relationships, but the Chorpita and Daleiden (2009) study found that it was not a commonly used treatment component in successful treatments for traumatic stress in children.

Another group has outlined steps that can be used for intervention development and testing with the kind of clients and clinicians, as well as settings (such as community clinics), for which interventions are developed. They argue that a modular approach, where a "menu" of common components of EST's and flowcharts to help with decision making are present, giving the clinicians more flexibility (Weisz et al., 2015). They also suggest that weekly monitoring of client symptoms and feedback for clinicians through supervision are also important components in adherence to EST's for community clinicians, along with the modular approach (Weisz et al., 2015). Proctor and Rosen (2008) also suggest that EST's should be implemented, then followed-up by evaluating how they are working and connecting back to research in a feedback loop. However, this disconnect between clinical research and practice in community settings is long-standing, and, may even begin as early as graduate school for mental health providers.

Other factors may determine therapist attitude and use of EST's as well. Nelson and Steele (2007) conducted a survey of 214 mental health practitioners from 15 states with a variety of theoretical backgrounds, and asked about their attitudes towards EST's. They found that therapists' training in EST's, the perceived openness of the clinical environment of EST's, and the therapists' attitude towards treatment research, were all significant predictors of the therapists' self-reported EST use (Nelson & Steele, 2007). They also found that negative

attitudes towards treatment research partially mediated the relationship between practitioner training and self-reported EST use, showing that those that actively had a negative attitude towards treatment research were less likely to use EST's or attend EST trainings (Nelson & Steele, 2007). Here we begin to see how therapist self-efficacy, and self-efficacy theory (defined below), play a role in therapist behavior change. As the theory states, the therapists' thoughts (here their thoughts about research) determine their feelings and behaviors (actions they will take with their clients).

Qualitative studies may be one way to bridge the gap between research and practice, by gathering more information directly from practitioners in the field (Kazdin & Weisz, 1998). In a qualitative study using focus groups to get provider feedback on implementing a specific EST for children and adolescents, Reding and colleagues (2016) found there were several themes that emerged. Many practitioners appreciated that the program incorporated flexibility to be able to adapt the intervention to their clients' needs (Reding et al., 2016). However, clinicians also wanted more time to build a therapeutic relationship with their clients instead of needing to begin with treatment modules right away (Reding et al., 2016), a concern that echoes other practitioner apprehensions described above. These focus groups also echoed concerns about system-level challenges of implementing the treatment in a community-based setting, such as time constraints and training taking up practitioner time (Reding et al., 2016).

Being able to cause a change in clinicians' practices is related to many aspects including the characteristics of the EST, the clients, the clinician, and contextual factors such as service system, the organization, and the service delivery system (Riemer et al., 2005). There is a need to study all of these aspects to understand how to support using ESTs consistently.

Summary

Although ESTs exist and are supported by major professional organizations, the majority of clients in treatment do not receive them. Lack of time and resources for training, and lack of supervision and consultation, are frequently cited as reasons that implementing ESTs in community settings does not work. However, many agencies are now providing the time and resources for further training in EMDR (EMDR Humanitarian Assistance Programs, 2017). Other barriers to implementing ESTs include time constraints, excessive paperwork, and lack of reimbursement for activities related to implementing ESTs such as training and supervision. Again, EMDR HAP (2017) has found that many nonprofit agencies provide supervision at a free or reduced cost for their employees wishing to complete their certificate in EMDR. Clinicians may be hesitant to use EST protocols because of the effect on the therapeutic relationship, unmet client needs, competence and job satisfaction, treatment credibility, hindering clinician innovation, and the feasibility of manualized treatments. However, previous research shows that not all of these concerns are veritable. Along with self-efficacy theory, therapists' thoughts about research determine their feelings and behaviors, or actions they will take with their clients. In addition, therapist characteristics, such as anxiety, self-efficacy, and personality traits, may influence their selection, use, and evaluation of EST components, which I will explore further in the next section.

Qualitative studies may also be a way to bridge the gap between research and practice, by gathering more information directly from practitioners in the field (Kazdin & Weisz, 1998). In a qualitative study of practicing therapists' attitudes towards research, Gyani and colleagues (2015) interviewed therapists to understand their feelings about research. They found two different main themes that they describe as "philosophical issues about the nature of evidence," and how therapists make decisions (Gyani et al., 2015).

Under the nature of evidence theme, several therapists felt that RCT's did not contain representative samples (Gyani et al., 2015). Specifically, some therapists stated that due to RCT exclusion criteria, clients with comorbid disorders would not be included in the research trial, but are more typical of the clients that they see in community practice (Gyani et al., 2015). Therapists in this study also felt that quantitative research did not provide a full enough picture that qualitative research might, and 18 therapists felt they would rather see studies that incorporated both quantitative and qualitative research (Gyani et al., 2015). All but one of the 33 therapists interviewed felt that the therapeutic alliance was the most important factor in whether or not treatment is successful (Gyani et al., 2015).

Under the theme of how therapists make decisions, most therapists interviewed stated that they relied more heavily on their own clinical judgement to know what is best for clients (Gyani et al., 2015). Finally, the perceived rigidity of empirically-supported treatment manuals, as well as clients having a choice in their own treatment were mentioned by several therapists interviewed as important to their decision making process for how to treat a client (Gyani et al., 2015).

Dissemination of research and EST's to community clinicians, which is affected by training, treatment location, and other professional barriers, may be playing a role in the disconnect as well. Exposure sessions for PTSD have the most empirical evidence, but are also the most underused treatment (Farrell et al., 2013; Harned et al., 2013). Reasons for this, as cited by therapists, range from exposure carrying a high risk of harm to clients, to clients being unable to tolerate exposure, therapist characteristics such as anxiety and self-efficacy, but mostly, lack of use of EST's, and exposure sessions specifically, is related to therapist training (Foy et al., 1996). Research has shown the key barriers to using exposure therapy in practice are in fact

therapist factors, and not client factors. Armed with this knowledge, the field may be able to make changes to therapist education and training in order to increase EST use and quality in community practice.

CHAPTER 5. THERAPIST CHARACTERISTICS

Self-Efficacy

Several characteristics of individual therapists may influence their selection, use, and evaluation of EST's. One of these characteristics is the concept of *"self-efficacy."* Self-efficacy refers to people's expectations or perceptions of their own abilities and performance, and relatedly, their expectations for success in their endeavors (Bandura, 1984; Larson et al., 1992). Self-efficacy theory states that a person's perceived self-efficacy, or their judgement of their own ability to perform in a given situation, determines their behaviors, thoughts, and emotional reactions to a given situation (Bandura, 1982). This matches well with the theoretical mechanisms underlying CBT – that changing a person's thoughts (or thoughts about their abilities) can have an impact on their future cognitions, behaviors, and emotions.

Bandura's theory describes four sources of information that increase or decrease a person's perception of their self-efficacy as, 1) enactive attainments: performing the specific desired behavior successfully; 2) vicarious experiences: observing the specific behavior being performed by someone similar to them; 3) verbal persuasion: being told that one possesses capabilities that will help in performing the desired behavior; and 4) one's psychological state (e.g., emotional arousal) that may help or hinder performance (Bandura, 1982; Larson et al., 1992). Generally, Bandura (1982) found that positive experiences with each of these different modes of influence can strengthen and raise perceived self-efficacy, but that positive enactive mastery experiences produced the strongest effect. That is, those who actually perform the desired behavior or skill successfully are most likely to improve their own judgement of their general ability to perform the behavior or skill. Bandura also found that the more perceived self-efficacy a person had, the more performance accomplishments they were able to attain and the

more likely they were to persist until they succeeded as well (Bandura, 1982). Accordingly, it may be that the more positively you think about yourself and your abilities in a certain area, the more likely you are to succeed in that area.

Larson and colleagues (1992) applied self-efficacy theory and principles to counselors, creating the Counseling Self-Estimate Inventory (COSE). Initially developed as a response to the lack of appropriate measures for self-efficacy studies specifically conducted with therapists, the COSE assesses counselor trainees' judgements of their ability to successfully counsel clients in counseling situations or their expectations for success in counseling situations (Larson et al., 1992). Larson and Daniels (1998) specifically define counseling self-efficacy as "one's beliefs or judgments about her or his capabilities to effectively counsel a client in the near future" (p. 180). Developed in 1992, by 1998 the COSE had been used in 32 studies. Larson and Daniels (1998) found that therapists who received positive feedback from a supervisor subsequently showed increased counselor self-efficacy (COSE) scores. In a follow-up study, the authors found that counselors who received negative feedback from a supervisor had a decrease in self-efficacy scores (Daniels & Larson, 2001). Therefore, supervision experiences and therapist self-efficacy are not only related to each other, but also to therapists' EST component use. Positive supervision experiences and therapist self-efficacy may be factors in how much a therapist knows about, and chooses to use, EST components in their practice.

Relatedly, Mullen and Uwamahoro (2015) found that graduate students in a counseling program increased their counseling self-efficacy over the course of their program (from orientation to their last clinical meeting) based on their amount and quality of their counselor training and coursework. Schwartz (2016) also found that supervision was an integral part of increasing counseling self-efficacy and that hours spent providing group or family counseling,

were significantly positively related to increased counseling self-efficacy. While research exploring counselor self-efficacy is growing, most studies appear to be conducted with graduate students currently in a graduate training program. The current study will provide more information about counseling self-efficacy for therapists currently practicing in community settings, and not therapist trainees.

Graduate training programs may have a substantial impact on self-efficacy and other traits for new practitioners. Barbee, Scherer, and Combs (2003) found that training in graduate school was important to how new therapists felt when beginning their careers. Having completed substantial counseling course work, having related work experience, and a pre-practicum service-learning experience were all influential factors in increasing their counseling self-efficacy and decreasing their anxiety (Barbee et al., 2003). Sufficient and appropriate graduate school training experiences influence therapists' later feelings of anxiety and self-efficacy in their job.

More recently, Gockel and Burton (2014) found that among social work graduate students, foundational practice classes that accompany or precede a practicum experience lead to increased counseling self-efficacy, and decreased anxiety, rumination, and personal distress in interpersonally challenging counseling experiences. Role-playing counseling scenarios in a large group was particularly related to increases in counseling self-efficacy (Gockel & Burton, 2014). This fits with self-efficacy theory in that positive enactive mastery, or actually performing the desired behavior or skill successfully, improves a person's judgement of their ability to perform the behavior or skill.

Drawing from the above studies (Barbee et al., 2003; Daniels & Larson, 2001; Gockel & Burton, 2014; Mullen & Uwamahoro, 2015; Schwartz, 2016), self-efficacy may also be related

to use of EST's. There is some evidence which suggests that therapists' sense of professional self-efficacy plays a role in their evaluation and use of EST's (Schiele, Weist, Youngstrom, Stephan, & Lever, 2014). Specifically, Schiele and colleagues (2014) found that greater counseling self-efficacy significantly predicted better quality of practice, increased knowledge of EST's, and increased use of EST's in treatment (Schiele et al., 2014).

Most therapists tend to think of themselves as having well above average clinical skills, with few therapists seeing themselves as falling into the lower half of all therapists (Parker & Waller, 2015; Walfish, McAlister, O'donnell, & Lambert, 2012; Waller & Turner, 2016). Therapists also tend to over-estimate their clients' improvement rates (Waller & Turner, 2016). Taken together, if therapists feel that they are doing well, they may have little motivation to change (Waller & Turner, 2016). Best practices to remedy this would be if therapists assess their own anxiety (Harned et al., 2013), develop and maintain therapist competence over time, ensure therapists' continual adherence or fidelity to the manual, and measure client outcomes to determine success (Waller & Turner, 2016). Again, and in line with self-efficacy theory, Waller and Turner (2016) also suggest that therapists can apply CBT principles, such as cognitive restructuring, monitoring, and behavior change, to their own learning, and, therefore, their EST component use.

Anxiety

In addition to self-efficacy, anxiety has also been extensively measured in the counseling self-efficacy and counselor literature and may predict EST component use. For the purposes of this study, I define anxiety from the APA's DSM-5 diagnostic criteria. That is, anxiety involves excessive, and difficult to control, worry, or apprehensive expectation, about any non-specific event(s) or activity (American Psychiatric Association, 2013). The worry of anxiety is out of proportion to the actual likelihood or impact of the anticipated event or activity and interferes

with everyday tasks (American Psychiatric Association, 2013). If self-efficacy is our judgement that we are able to undertake certain tasks, it stands to reason that if we feel unsure of our abilities to complete a task well, we would feel anxiety in place of feeling self-efficacious.

Larson and colleagues (1992) found that both state and trait anxiety (as measured by the STAI) were significantly negatively related to the total and five factor scores on the COSE. That is, those therapists with higher feelings of counseling self-efficacy had lower feelings of anxiety, and vice versa. Friedlander and colleagues (1986) also found that self-efficacy expectations and anxiety were inversely related, and that those therapists that performed better also had lower levels of anxiety.

Personality Factors

Finally, personality factors may also be related to therapists' use of EST components, as using EST components in treatment would indicate an ability to perform their job effectively, which may also be related to their feelings of self-efficacy. There is an existing body of work examining personality factors and career factors, such as job performance or job stress. Briefly, the most common factor model of assessment of personality traits is a five-factor model termed the "Big 5" (Caprara, 2001). These factors have been named openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (Caprara, 2001). Personality traits are considered to be consistent and stable across the lifespan (Caprara, 2001).

Sur and Ng (2014) argue that situational job stressors primarily impact what is termed the "Other 3" dimensions, which include locus of control, self-monitoring, and self-efficacy. Fitting with the interactional perspective, where personality factors mediate the relationship between a person and their environment, Sur and Ng's model posits that the "Big 5" personality traits moderate the relationship between the "Other 3" dimensions of personality and job stress (Sur & Ng, 2014). Therefore, this theory could be extended to the current study to hypothesize that the

Big 5 personality traits would mediate the relationship between therapists' feelings of self-efficacy and their job stress, or interpersonal interactions with their clients. Relatedly, these may all affect therapists choosing to use EST components or not in treatment.

Judge, Higgins, Thoresen, and Barrick (1999) define the Big 5 as they relate to other constructs. They state that neuroticism is related to anxiety, instability, and stress proneness; extraversion is associated with sociability, ambitiousness, and assertiveness; conscientiousness is related to achievement orientation, dependability, and orderliness; openness to experience relates to intellectual, imaginative, and nonconforming characteristics; and agreeableness is associated with being trusting, cooperative, and likeable (Judge et al., 1999). For the purposes of the current study, I am most interested in the characteristics that relate to job performance and self-efficacy, especially in a therapeutic setting. Since neuroticism is related to anxiety, I expect that this may be an influential personality factor in counseling self-efficacy. Conscientiousness is linked to job performance (Judge et al., 1999), as well as an achievement orientation, and therefore should be positively related to counseling self-efficacy.

Summary

Drawing the above literature together theoretically, clinicians who rate higher on extraversion, openness to experience, and agreeableness, lower levels of anxiety and higher ratings of counseling self-efficacy will be more likely to frequently use the full range of therapeutic components found in CBT and EMDR manuals. The theory that characteristics of individual therapists may influence their selection, use, and evaluation of ESTs is a novel theory. Therapists with higher anxiety and lower self-efficacy may be less likely to use EST components frequently.

Therapists' personality characteristics may play an important role in their selection and use of EST components in particular. Personality factors may also play a role in therapist

selection and use of treatment elements, specifically the Big 5 personality factors may be a factor. Neuroticism is related to anxiety, and conscientiousness is linked to job performance and an achievement orientation, and both of these traits may be influential in the selection and use of EST components. Clinicians who rate higher on the traits extraversion, openness to experience, and agreeableness, may also be more likely to select and use EST components. While some research has linked these constructs to therapist outcomes and use of EST components, no previous study has looked at these characteristics and therapist treatment together, and more investigation is still needed.

CHAPTER 6. SUMMARY AND HYPOTHESES

As noted above, Addis and Krasnow (2000) suggest that information is needed about how clinicians are using EST's and treatment components in clinical practice. They suggest that their survey provided quantitative data, but there is also a need for qualitative data asking therapists directly about this topic. They also suggest that better communication and collaboration is needed between researchers and clinicians about how the components of EST manuals are working in practice. That is, how are EST components working outside of a controlled, clinical environment? Finally, the Addis and Krasnow (2000) study only surveyed licensed psychologists, almost all of which held a doctoral degree in their field. The authors call for more information about how social workers, specifically, and other masters-level clinicians feel about empirically-supported, manualized treatment components.

As reviewed above, Chorpita and Daleiden (2009) conducted a major review of the child treatment literature to find the most successful treatment components for several mental health diagnoses. They reviewed RCT's for traumatic stress in children and found that exposure, cognitive elements, psycho-education for the child, relaxation, psychoeducation for the parent, and maintenance/relapse prevention were the most common practice elements in the 11 treatments examined (Chorpita & Daleiden, 2009). The Chorpita and Daleiden (2009) study shows the importance of surveying practicing clinicians about the individual treatment components of CBT and EMDR in order to identify what predicts the use of various treatment components.

The purpose of this dissertation research is to identify the individual components of CBT and EMDR that are being used by therapists in community practice in an attempt to understand why certain techniques are employed to a greater or lesser extent in practice. To accomplish this,

I survey community therapists use of the various techniques and test the theory that the therapist characteristics of formal training, theoretical training and background, and personality factors, predict the differential use of EST components. Testing this theory requires a measure of what therapy components therapists are using in community settings.

The Therapists' Experiences with Empirically Supported Treatment Components Questionnaire (EST-Q), a measure created for this study, was designed to assess EST therapy components empirically supported by the CBT and EMDR literature and the extent to which individuals rate their use in their therapy practice for PTSD or trauma exposure. Specifically, the EST-Q asks therapists to rate how often they use the 32 different EST components listed in Table 1 (see above in chapter 3). The questionnaire will allow me to examine the frequency of the use of these components. Drawing from the above, 1) I hypothesize that items on the EST-Q will load onto at least two factors: one with mainly CBT techniques and one with EMDR techniques (there may also be a factor with items crossing the two techniques). Given that at least two factors emerge, one with unique CBT and one with unique EMDR components (additional cross-loading factors are also expected to emerge), 2) I hypothesize that EMDR therapists will use EMDR techniques at a higher frequency than CBT therapists. The theoretical reasons for this hypothesis include (a) the knowledge that CBT with exposure sessions has the most empirical evidence for the treatment of PTSD but is also an underutilized treatment (Farrell et al., 2013; Harned et al., 2013); (b) there is one main, generally agreed upon treatment manual for EMDR and any trainings have to follow the EMDR protocol; since it is uniform, anyone trained in EMDR will be trained not only the same way, but also taught to follow the entirety of the manual or treatment protocol.

Based on the theoretical predictions and empirical evidence to date outlined in the above sections, 3) I predict clinicians who rate higher on the "Big Five" personality traits extraversion, openness to experience, and agreeableness, as well as those with lower levels of anxiety and higher ratings of counseling self-efficacy, will be more likely to use the broad range of therapeutic components found in CBT and EMDR manuals. Theoretically, the "Big Five" personality traits – extraversion, agreeableness, openness to experience, conscientiousness, and neuroticism will be related to self-efficacy, anxiety, and use of empirically supported treatment (CBT and EMDR) components. In addition, I predict that higher levels of anxiety and lower levels of self-efficacy will be related to less frequent use of CBT and EMDR components.

In addition to the above hypotheses, this dissertation research aims to add descriptive information about the use of various EST techniques and about therapists' use of the components of CBT and EMDR. In order to delve deeper into these quantitative findings, qualitative interviews were conducted with a small sample of practicing community therapists and are presented here in a separate chapter. For these interviews, I framed my interview questions around my research question, what are the experiences of therapists who use components of the empirically-supported treatments Eye Movement Desensitization and Reprocessing (EMDR) and Cognitive Behavioral Therapy (CBT)?

CHAPTER 7. METHOD

Participants for the Quantitative Study

Four hundred sixty-two potential participants followed a link to the Qualtrics survey and agreed to the informed consent by clicking that they agreed to participate in the study. Of those 462 potential participants who agreed to the informed consent, 434 (93.94%) answered the study inclusion question that they were a licensed therapist who spends at least 50% of their professional time seeing clients for individual therapy (both inclusion criteria questions). Sixteen potential participants (3.46%) were excluded from the study because they did not meet inclusion criteria and twelve potential participants (2.60%) did not answer the question regarding inclusion criteria, and therefore were not able to continue onto the survey. Of those 434 participants who qualified for the study, 425 participants (97.93%) answered that they see clients who have experienced traumatic events. Although those participants who did not see clients who had experienced traumatic events were allowed to continue the survey, all nine participants who answered the did not see trauma in their practice also chose not to answer the next questions on the survey – the *Therapists' Experiences with Empirically Supported Treatments Questionnaire* (EST-Q). Finally, participants who did not complete at least 80% of the EST-Q items (at least 26 of the 32 items) were not included in the current study. There were 116 participants (25.11%) who were excluded because they completed 26 or fewer EST-Q items (76 potential participants, or 16.45% of the total potential participants, did not complete even one question on the EST-Q). Therefore, only 346 (74.89%) participants were included in the final sample for analysis.

The final sample of 346 participants was primarily female (285 participants; 84.07%) and white (294 participants; 86.98%). Participants ranged in age from 24 to 80 years old, with the mean age being 44.59 years. On average, the participants in the current study had completed

their graduate degree 13.26 years ago and saw 21 clients per week. This sample is representative of mental health professions such as social work where the vast majority of practitioners are female and white (Salsberg et al., 2017). See Table 2 below for more complete participant demographic information.

Details about where and how the survey was sent out, as well as how many participants were licensed in each state, can be found in Appendix A, B, and C.

Measures

Therapists' Experiences with Empirically Supported Treatment Questionnaire (EST-Q)

As noted above, the EST-Q is a measure designed specifically for this study and is the main outcome measure for the current study. The measure asks practicing community therapists how often they use 32 different components of empirically supported treatments for trauma. Specifically, it combines essential elements of CBT and EMDR. It is available in Appendix D and asks, "Thinking only about your clients who are in treatment for PTSD symptoms or trauma exposure, please consider the components of Empirically-Supported Treatments listed below. Please check how often in your practice you use each component with survivors of trauma." The scale for the EST-Q is a 5-point Likert scale ranging from "0 = Never (I never use this with any of my clients)" to "4 = Always (I always use this with all of my clients)." Items specific to EMDR were taken from EMDR protocol (Shapiro, 2001) and the EMDR Humanitarian Assistance Program manual. They include items such as "Bilateral stimulation with negative cognition and traumatic event (e.g. eye movements, tactile or visual stimulation, etc.)" and "Use 'Cognitive Interweave' to open blocked processing by elicitation of more adaptive information." Items specific to CBT were adapted from TF-CBT protocol (Cohen et al., 2006).

Table 2. *Participant Demographics*

	Mean (SD)	
Age (*n* = 338)	44.59 (12.99)	
# of Individual Therapy Clients per Week	21.03 (8.10)	
Years Since Graduate Degree (*n* = 340)	13.26 (10.77)	
		N (%)
Gender (*n* = 339)	Female	285 (84.07%)
	Male	51 (15.04%)
	Non-binary/third gender	2 (0.59%)
	Prefer not to answer	1 (0.29%)
Race (*n* = 338)	White	294 (86.98%)
	Hispanic or Latino	16 (4.73%)
	Prefer to Self-Describe	10 (2.96%)
	Prefer Not to Answer	9 (2.66%)
	Black or African American	6 (1.78%)
	Asian	3 (0.89%)
Highest Degree Held (*n* = 339)	Master's Degree	226 (66.67%)
	Doctoral Degree	109 (32.15%)
	Other	4 (1.18%)
Type of License (*n* = 338)	Licensed Clinical Social Worker	125 (36.98%)
	Licensed Psychologist	84 (24.85%)
	Licensed Professional Counselor	54 (15.98%)
	Other	43 (12.72%)
Type of License – "Other" (*n* = 43)	Licensed Marriage and Family Therapist	32 (9.47%)
	Licensed Mental Health Counselor	19 (5.62%)

Table 2. *Continued.*

Years Practicing as a Therapist (*n* = 341)	5 years or less	87 (25.51%)
	6-10 years	103 (30.21%)
	11-15 years	35 (10.26%)
	16-20 years	42 (12.32%)
	21-25 years	26 (7.62%)
	26-30 years	15 (4.40%)
	31-35 years	14 (4.11%)
	35 years or more	19 (5.57%)
Primary Employment Setting (*n* = 340)	College/University	6 (1.76%)
	Community Clinic/Agency	82 (24.12%)
	Managed Care Organization	7 (2.06%)
	Primary/secondary school	3 (0.88%)
	Private Practice	195 (57.35%)
	Hospital	25 (7.35%)
	Other	22 (6.47%)
Type of Clients Primarily Seen (*n* = 338)	Children (ages 3-11)	32 (9.47%)
	Adolescents (ages 12-18)	49 (14.50%)
	Emerging Adults (ages 19-27)	37 (10.95%)
	Adults (ages 28-65)	216 (63.91%)
	Older Adults (ages 65+)	4 (1.18%)
Theoretical Orientation (*n* = 257)	Other	70 (27.24%)
	Eclectic	65 (25.29%)
	Family Systems	55 (21.40%)
	CBT	25 (9.73%)
	Interpersonal	22 (8.56%)
	Psychodynamic/Analytic	8 (3.11%)
	Existential/Humanistic	5 (1.95%)
	Experiential	4 (1.56%)
	Social Learning	2 (0.78%)
	Behavioral	1 (0.39%)

They include items such as “Utilize homework and other educational materials – informational handouts, worksheets, etc. with client,” “Use of guided imagery/imaginal exposure,” and “Use of in-vivo exposure.” The EST-Q was summed as well as factored for this study. The possible scores for the total EST-Q range from 0 – 128 (32 items on a scale from 0-4). Psychometrics are presented in the results section.

Big Five Inventory **(BFI)**

The Big Five (John & Srivastava, 1999) personality traits of openness, conscientiousness, extraversion, agreeableness, and neuroticism were assessed using the BFI (John, Donahue, & Kentle, 1991; John, Naumann, & Soto, 2008). Respondents are presented with 44 characteristics (e.g., “Is original, comes up with new ideas”) and asked to rate their personal applicability along a five-point Likert scale (1= “Disagree Strongly,” 5= “Agree Strongly”). Subscale scores are created by averaging responses to items representative of each personality trait. In the current study, the subscales range in internal consistency: Neuroticism (α = .83), Agreeableness (α = .73), Extraversion (α = .85), Conscientiousness (α = .83), and Openness (α = .79).

Counseling Self-Estimate Inventory **(COSE)**

The Counseling Self-Estimate Inventory (COSE; Larson et al., 1992) is a 37-item instrument created to measure counseling self-efficacy, or how mental health therapists feel about their own skills. The randomly ordered statements include both positive and negative wording that ask participants to rate themselves on how they feel they would actually perform a counseling skill during a counseling interview at the present time. The COSE uses a six-point Likert scale from 1 – *strongly disagree* to 6 – *strongly agree*. Higher scores on the COSE reflect stronger perceptions of the therapists’ self-efficacy. Larson and colleagues (1992) found that the total instrument had good internal consistency (α = .93). They also found that there were five

factors with a range of internal consistency: Microskills (α = .88), Process (α = .87), Difficult Client Behaviors (α = .80), Cultural Competence (α = .78), and Awareness of Values (α = .62). Reliability estimates for the current study include: Total COSE (α = .89), Microskills (α = .84), Process (α = .81), Difficult Client Behaviors (α = .70), Cultural Competence (α = .74), and Awareness of Values (α = .27).

***State-Trait Anxiety Inventory – Form Y* (STAI)**

The STAI (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983) is a 20-item self-report measure of anxiety symptoms. The STAI measures both state (temporary condition in specific situations) and trait (general tendency to perceive situations as threatening) anxiety (Spielberger, 1966). It indicates the intensity of anxious feelings and was chosen for this study because it was initially developed as a measure to study anxiety in normative adult populations. Items include statements such as, "I feel as ease" (state) or "I am a steady person" (trait). They are rated on a 4-point Likert scale from "1 = not at all" to "4 = very much so." STAI items have demonstrated good test-retest reliability (r = .69 – .86), as well as an acceptable level of internal consistency across samples (α's > .80) (Spielberger, 1966). In the current study, internal consistency was excellent with trait anxiety reliability (α = .92) and state anxiety reliability (α = .93).

Demographics

Demographic questions, such as age, race/ethnicity, type of professional license held, years in practice, employment setting, theoretical orientation, etc. were included in the online survey. Further questions in the survey ask practitioners open-ended questions, such as, "Are there any problems/disorders for which you feel using CBT/EMDR is inappropriate?" Clinicians are also asked whether they use bilateral movements with EMDR ("yes"/"no") and how they

conduct bilateral movements if the use them ("buzzers," "lights," "therapist's hand/wand/etc." and "other" with room to fill in more information about the other modality).

Procedures

Participants were recruited for a study on therapists' experiences with empirically-supported treatments in an online format. Participants were recruited by using IRB approved study scripts and flyers through the following methods: 1) the PI electronically contacted therapists she knows personally or through networking with other therapists, 2) the PI contacted listserv and online bulletin board administrators for professional organizations, of which she is a member (more details below), asking them to post the study flyer or script, 3) the PI utilized social media sites such as Facebook, to post in relevant online groups (again NASW, APA, or networking on her personal Facebook page), and 4) the PI bought access to a mailing list for marriage and family therapists (email addresses were not available) and mailed a study flyer to a random sample of 2,000 marriage and family therapists. See Appendix A and B for information about all organizations contacted and whether, and how, they distributed information about the study to recruit participants.

The participants were given a Qualtrics link (either from an electronic or paper study flyer, or through email distribution) where they first read and completed informed consent and then proceeded onto the questionnaires. Contact information for the investigator was available if participants had any questions or concerns. Study questionnaires (more details below) asked basic demographic questions (what kind of degree they have/what type of therapy training they have, etc.), how often they used specific empirically-supported treatment components, as well as questions about their personality, and how they see themselves as a therapist (counseling self-efficacy). One question on the online questionnaire allowed participants to enter their email address if they were interested in participating in an interview as well. The Iowa State University

Office for Responsible Research's Institutional Review Board reviewed and approved this study (IRB #17-204; see Appendix J).

Inclusion criteria for this study included, 1) being a licensed therapist (social worker, psychologist, marriage and family therapist, mental health counselor, etc.) who, 2) spends at least 50% of their professional time seeing clients for individual therapy. There was not a requirement for therapists to see clients who have experienced trauma and PTSD because of the desire for a broader sample (therapists use the empirically-supported treatment CBT for depression, anxiety, etc.), as well as research (e.g., Liu et al., 2017) finding that most people experience some type of trauma in their lives. Participants that practice in a community setting were the focus of recruitment; however, participants were not excluded based on their practice setting. Those therapists still in training (graduate school) were excluded from this study (those who are licensed in their profession would not be in graduate school). Previous research in the field has focused on convenience samples of graduate students in training, but the focus of the current study aimed to expand from that and recruit participants who have completed their training in order to understand what is currently happening in community therapists' offices.

CHAPTER 8. RESULTS

Descriptive Statistics of Sample Training and Experience

Descriptive Statistics on Diagnosis, CBT, and EMDR Training and Information

Participants were asked to rate themselves with the following statement, "I follow a treatment manual closely," as "very true," "somewhat true," or "not true." Of the 325 participants who answered the question, only 53 participants (16.31%) felt the statement was "very true," while 144 (44.31%) felt it was "somewhat true," and 128 (39.38%) felt it was "not true" for them. Participants were also asked whether they use a structured questionnaire to diagnose PTSD in a client. A slight majority of the 323 participants who answered the question (174 participants; 53.87%) answered that they did not use a structured questionnaire to diagnose PTSD in a client, while 149 participants (46.13%) said that they did use a structured questionnaire.

CBT

Two hundred seventy-two participants (78.61%) answered that they were trained in Cognitive Behavioral Therapy, or CBT. Of those who were trained in CBT, 121 (44.49%) answered that they personally had to pay for their CBT training. Those who were trained were trained in a variety of ways including certificate programs, continuing education, and many were trained in graduate school. While many participants could not recall or estimate how much this training cost them, others estimated it cost anywhere from $100 to $200,000 (spent on graduate school). Of those trained in CBT, all but 16 participants (256 participants; 94.12%) – stated that they use CBT in their practice. When asked what types of problems they treat using CBT, 242 participants (88.97%) selected "anxiety disorders," 236 participants (86.76%) selected "depression," 215 participants (79.04%) selected "PTSD/trauma exposure," 134 participants

(49.26%) selected “marital/relationship problems,” 113 participants (41.54%) selected “addictions,” 89 participants (32.72%) selected “health problems,” 68 participants (25%) selected “eating disorders,” and 42 participants (15.44%) selected “other.” Those who selected “other” indicated they also used CBT to treat ADHD (*n* = 5), behavior problems or disorders (*n* = 4), bipolar disorder (*n* = 3), chronic pain or health problems (*n* = 3), obsessive-compulsive disorder (*n* = 4), anger problems or anger management (*n* = 2), schizophrenia or other serious mental illness (*n* = 4), borderline personality disorder and other personality disorders (*n* = 4), sex therapy (*n* = 1), sex offending or sexual compulsions (*n* = 3), autism (n = 1), attachment (n =1), and psychosis (*n* = 1) among a few other disorders listed. Four therapists used this question to write that they do not use CBT at all, while another three therapists stated that they never use only CBT, with two specifically stating they only use CBT in conjunction with EMDR. Participants were also asked, “are there any problems/disorders for which you feel using CBT is inappropriate?” Overwhelmingly therapist participants responded that the decision to use a certain modality often depended on their client and their client’s presentation. Twenty-five different therapists responded that there was nothing that could not be treated with CBT. Many therapists also commented that they use parts or “some” of CBT, and 13 specifically mentioned that they would use parts of CBT, but in conjunction with other types of therapy, not alone. However, the most common response in the survey was that CBT was not appropriate for treating trauma or PTSD (*n* = 31). Other common responses of problems or disorders therapist participants felt that it was inappropriate to use CBT to treat included anxiety (*n* = 4), attachment (*n* = 6), personality disorders and in particular borderline personality disorder (*n* = 8), interpersonal problems (*n* = 4), couples and/or family therapy (*n* = 11), those with a cognitive disability or low cognitive functioning or IQ (*n* = 13), those who “intellectualize” or with a high

IQ (*n* = 6), grief (*n* = 5), dissociative clients (*n* = 6), those with active psychosis (*n* = 5), young children (*n* = 9), and those who have not previously benefitted from CBT (*n* = 8).

EMDR

One-hundred-thirty-five participants (39.02%) who completed the survey answered that they were trained in EMDR. Of these, 102 participants (75.56%) reported that they personally had to pay for their EMDR training. Training in EMDR again ranged from completing an EMDR HAP course, continuing education courses or certificate programs, training with the EMDR Institute or a certified institute trainer, and three participants answered that they were trained in graduate school. Participants' estimates of their costs incurred for EMDR training ranged from $250 to $40,000, while others estimated their costs in time invested from 100 hours to two years to keeping up with advances and continuing education for approximately 20 years. Of those trained in EMDR, all but four participants (131 participants; 97.04%) stated that they use EMDR in their practice. On average, participants trained in EMDR had been using it in their practice for individual therapy for 6.86 years, though it ranged from those who had not used EMDR in their practice yet to someone who said they had been using it for 30 years, or "since first introduced to it in the late 1980's." When asked what types of problems they treat using EMDR, 130 participants (96.30%) selected "PTSD/trauma exposure," 109 participants (80.74%) selected "anxiety disorders," 94 participants (69.63%) selected "depression," 53 participants (39.26%) selected "addictions," 50 participants (37.04%) selected "marital/relationship problems," 42 participants (31.11%) selected "health problems," 35 participants (25.93%) selected "eating disorders," and 22 participants (16.30%) selected "other." Those who selected "other" indicated they also used EMDR to treat ADHD, attachment (*n* = 3), children's behavior issues, chronic pain (*n* = 2), dissociation (*n* = 3), grief or loss (*n* = 3), fostering or adoption, obsessions and/or compulsions (*n* = 2), panic attacks, secondary trauma or burnout, self-esteem issues, separation

anxiety, sex therapy, and two participants stated that they felt there was not any problem or disorder they thought they would not use EMDR to treat (indicating EMDR would be appropriate to treat any problem/disorder), while one participant stated they would only use it for their trauma clients.

Participants were also asked, "Are there any problems/disorders for which you feel using EMDR is inappropriate?" Responses to this question indicated therapists would not use EMDR to treat many different problems and disorders. The most common response (n =15) was that clinicians would not use EMDR to treat clients who were dissociative or who had a dissociative disorder. Ten therapists stated that they would not use EMDR to treat someone with active psychosis while six therapists stated they would not use the modality for those clients actively using substances. Eleven therapists stated that there were "many" disorders for which they would not use EMDR for treatment, with one saying there were "too many to list." Multiple therapists also listed other specific problems/disorders they would not use EMDR to treat, such as borderline personality disorder and other personality disorders (n = 6), those in couples or family therapy (n = 4), grief (n = 3), a pregnant client (n = 3), adjustment disorders (n = 2), attention disorders or ADHD (n = 2), those who had an upcoming court case (n = 2), schizophrenia (n = 2), those with suicidal ideation (n = 2), and two therapists stated they would not use EMDR with children. While 17 participants stated they had not found anything that they would not use EMDR to treat, seven participants stated it would depend on the client. Five therapists stated that EMDR should only be used to treat trauma, and another stated they "rarely see anyone who hasn't experienced trauma."

Table 3 below presents the frequency indicated by therapist participants of how often they use each of the 32 different essential elements of CBT and EMDR, or the components of

empirically supported treatments for trauma represented in the Therapists' Experiences with Empirically Supported Treatment Questionnaire (EST-Q). Additionally, this frequency table is also broken down by type of therapist (those trained in CBT and those trained in EMDR) in Appendix X.

Hypothesis 1: The data from the Therapists' Experiences with Empirically Supported Treatment Questionnaire (EST-Q) measure will load onto at least two factors one factor with unique CBT techniques and one factor with unique EMDR techniques.

The factor structure of the Therapists' Experiences with Empirically Supported Treatment Questionnaire (EST-Q) was examined using exploratory factor analysis with a sample of 346 practicing licensed therapists. Missing data was handled by pairwise deletion, as acceptable given the limited missingness in the data (Tabachnick & Fidell, 2001) leaving 329 cases for analysis. This is an appropriate sample size as there were 32 items on the EST-Q, and at least 5-10 participants per item is recommended (Russell, 2002). The goal of the exploratory factor analysis was to determine the most theoretically consistent structure while minimizing cross loadings and parsimony in the number of factors. Kaiser's criterion (i.e., eigenvalues greater than one) was initially used as the primary criterion for selecting the number of factors, then confirmed through visual inspection of a scree plot (Preacher & MacCallum, 2003). Examination of the amount of variance explained by the factors was also employed and the consistency of item loadings with theory and predictions (i.e., that the items would factor into unique EMDR and CBT components) were also considered. Loadings of .30 or greater were considered salient. Given the goals of analysis and theoretical considerations, principal factors extraction with direct oblimin rotation was used (Tabachnick & Fidell, 2001). The factorability of the items appeared appropriate given the pattern of correlations among the items, as many inter-item correlations exceeded .30. Coefficient alpha was used to assess internal consistency (Tabachnick & Fidell, 2001).

Table 3. *Frequency of EST-Q Items - Essential EMDR and CBT Elements Presented to Therapists*

	M (*SD*)	*n*	*Frequency*				
			Never	Rarely	Sometimes	Often	Always
Psychoeducation – provide the client information about traumatic experiences, trauma reactions, symptoms, and trauma reminders	4.62 (0.68)	363	0	8	18	77	260
Work on emotion knowledge/affect identification and emotion regulation/modulation skills	4.43 (0.76)	358	2	7	26	123	200
Explain that processing of trauma memories may continue after the session	4.41 (0.87)	357	5	11	29	98	214
Deep breathing exercises or breathing training	4.36 (0.82)	363	3	9	35	122	194
Increase awareness of problem-solving skills and/or social skills	4.25 (0.83)	355	1	11	51	129	163
Reevaluation – Check to make sure the client's positive results have been maintained	4.24 (0.91)	357	7	10	44	125	171
Address personal safety skills and assertive communication	4.23 (0.85)	358	4	8	48	141	157
Use of cognitive restructuring with client (thought-feeling model, connect negative feelings to thoughts, challenge thoughts, generate alternative thought, practice alternative thoughts)	4.00 (0.96)	354	7	15	76	129	127
Help client establish a calm/safe place in their mind to "go" when traumatic memories are too much	3.95 (1.11)	363	18	22	58	128	137
Review with client previous homework – praise efforts and troubleshoot obstacles	3.94 (1.02)	363	14	18	61	154	116
Use of guided imagery/imaginal exposure	3.88 (1.04)	362	15	23	62	154	108
Utilize homework and other educational materials – informational handouts, worksheets, etc. with client	3.82 (1.01)	362	8	29	85	137	103
Have client do body scan (i.e. "Where do you feel the trauma in your body?")	3.76 (1.11)	358	19	28	76	131	104

Table 3. *Continued.*

	M (*SD*)	*n*	*Frequency*				
			Never	Rarely	Sometimes	Often	Always
Provide progressive muscle relaxation (or provide other progressive relaxation skills)	3.71 (0.97)	359	10	29	86	163	71
Use of homework assigning (e.g. develop homework assignment, collaborate with client, make specific plan, troubleshoot obstacles)	3.70 (1.03)	355	10	35	91	135	84
Agenda setting – articulate & implement a specific agenda for session, identify other issues	3.64 (1.08)	369	18	32	100	133	86
Identify processing targets from positive and negative events in client's life (i.e. first or worst traumatic event)	3.61 (1.21)	368	36	25	79	135	93
Establish a stop signal for when traumatic memories are too much to continue processing/end of session	3.60 (1.32)	363	37	42	66	101	117
Elicit image of the traumatic event, negative belief currently held, desired positive belief, current emotion(s), and physical sensation (body location)	3.60 (1.20)	358	27	39	77	121	94
Help client develop a trauma narrative	3.55 (1.08)	352	21	28	109	126	68
Use of Subjective Units of Disturbance Scale ("SUDS") "How disturbing does it feel to you now?"	3.38 (1.43)	354	61	37	63	92	101
Assign thought record or daily diary to client (Client to record thoughts, feelings/emotions, behaviors/actions)	3.04 (1.02)	352	23	83	126	96	24
Have the client imagine a container to hold memories/thoughts when not working through them	3.00 (1.39)	369	79	56	82	90	62
Use of Validity of Positive Cognition ("VOC") "How true do those words ____ feel to you now?"	2.89 (1.47)	354	95	54	63	78	64
Use of a standard measure prior to session to assess client's level of symptoms for the day's session	2.83 (1.32)	368	75	84	85	76	48
I work with my clients to create a graded exposure hierarchy.	2.77 (1.27)	358	83	60	103	81	31

Table 3. *Continued.*

			Frequency				
	M (*SD*)	*n*	Never	Rarely	Sometimes	Often	Always
Provide client an explanation of Eye Movement Desensitization and Reprocessing	2.70 (1.69)	362	156	31	31	55	89
Use "Cognitive Interweave" to open blocked processing by elicitation of more adaptive information	2.54 (1.48)	354	144	30	66	72	42
Bilateral stimulation with negative cognition and traumatic event (e.g. eye movements, tactile or visual stimulation, etc.)	2.45 (1.61)	355	180	16	30	76	53
I always work through the entire graded exposure hierarchy.	2.43 (1.16)	358	100	87	102	55	14
Bilateral stimulation with positive cognition (e.g. eye movements, tactile or visual stimulation, etc.)	2.40 (1.58)	354	182	18	33	73	48
Use of in-vivo exposure	2.31 (1.19)	359	121	88	82	54	14

Seven factors with eigenvalues over one were extracted and accounted for a total of 65.84% of the total variance. Examination of the Scree plot, however, did not support a seven-factor solution. The Scree plot appeared to have a break between four and five factors (see Figure 1 below).

The analysis was then repeated, forcing a four-factor solution consistent with theory and hypotheses. The four-factor model accounted for 55.26% of the total variance. The suitability of this model was also assessed using the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO = .895), well above the minimum criterion of .5, suggesting the sample size was adequate. Bartlett's Test of Sphericity was significant, X^2 (496) = 6,178.75, $p < .001$, indicating that the items were suitable for factor analysis. Therefore, a four-factor model is presented as the final model in the current study. The four subscales that emerged all had good internal consistency (> .75) and were named CBT ($\alpha = .80$), EMDR ($\alpha = .93$), both ($\alpha = .77$; a factor containing items that are representative of both CBT and EMDR modalities), and exposure ($\alpha = .81$; a factor for items relating to exposure sessions that should be used in TF-CBT). Factor loadings are presented in Table 4, which shows that 13 items loaded onto the uniquely "EMDR" factor, seven items loaded onto the uniquely "CBT" factor, eight items loaded onto a "both" CBT and EMDR factor, and four items loaded onto an "exposure" factor. Examination of the salient loadings suggested that the four factors were consistent with expectations regarding the loading of the items onto EMDR and CBT related component factors. That is, the data from the EST-Q measure loaded onto a unique CBT factor and a unique EMDR technique factor. Additionally, at least two items, psychoeducation about trauma and progressive muscle relaxation, were expected to cross-load onto both factors, as these two components are part of both CBT and EMDR – these items and six other items loaded onto a third factor that appears to have elements common

to both CBT and EMDR. Finally, a fourth factor, “exposure,” also emerged with four items and is theoretically consistent with previous research identifying a small subset of therapists who are trained in or willing to use exposure therapy to treat trauma (Farrell et al., 2013; Harned et al., 2013).

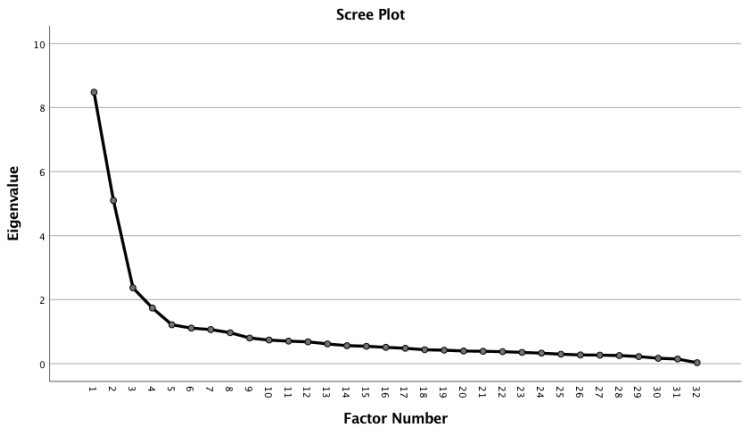

Figure 1. Scree plot of the EST-Q factor loadings

Hypothesis 2: EMDR therapists will have higher mean scores on their scale than CBT therapists.

Since univariate ANOVAs cannot test the hypothesis that therapists would differ on their ratings of the subscale by type of therapist, a profile analysis was performed using a four by four (therapist type [4] by subscale [4]) mixed effects repeated-measures factorial ANOVA. A significant therapist type by subscale interaction was anticipated. Scores for each subscale of the EST-Q were derived by taking the mean of all subscale items, placing overall subscale score along the same 1-5 point range used in the measure, and providing a clear metric for interpretation (e.g., a score of 2 on the EMDR subscale indicates the participant ‘Sometimes’ uses EMDR components). Type of therapist (EMDR, CBT, both, or none) was defined by therapists’ answers to two questions in the survey (1) “Are you trained in Cognitive Behavioral Therapy, or CBT?” and (2) “Are you trained in Eye Movement Desensitization and Reprocessing

Table 4. *Factor Loadings of the EST-Q*

	Factor			
EST-Q Item	*EMDR*	*CBT*	*Both*	*Exposure*
Bilateral stimulation with negative cognition and traumatic event (e.g. eye movements, tactile or visual stimulation, etc.)	**.917**	—	—	—
Bilateral stimulation with positive cognition (e.g. eye movements, tactile or visual stimulation, etc.)	**.908**	—	—	—
Use of Validity of Positive Cognition ("VOC"): "How true do those words ____feel to you now?"	**.823**	—	—	—
Provide client an explanation of Eye Movement Desensitization and Reprocessing	**.810**	—	—	—
Use "Cognitive Interweave" to open blocked processing by elicitation of more adaptive information	**.758**	—	—	—
Have the client imagine a container to hold memories/thoughts when not working through them	**.717**	—	.307	—
Have client do body scan (i.e. "Where do you feel the trauma in your body?")	**.691**	—	.372	
Elicit image of the traumatic event, negative belief currently held, desired positive belief, current emotion(s), and physical sensation (body location)	**.675**	—	—	.327
Establish a stop signal for when traumatic memories are too much to continue processing/end of session	**.667**	—	.449	
Use of Subjective Units of Disturbance Scale ("SUDS") "How disturbing does it feel to you now?"	**.653**	.332	—	.446
Help client establish a calm/safe place in their mind to "go" when traumatic memories are too much	**.591**	—	.486	
Identify processing targets from positive and negative events in client's life (i.e. first or worst traumatic event)	**.541**	.433	—	.426
Reevaluation – Check to make sure the client's positive results have been maintained	**.423**		.415	—
Use of homework assigning (e.g. develop homework assignment, collaborate with client, make specific plan, troubleshoot obstacles)	—	**.812**	—	—

Table 4. *Continued.*

EST-Q Item	*Factor*			
	EMDR	*CBT*	*Both*	*Exposure*
Utilize homework and other educational materials – informational handouts, worksheets, etc. with client	—	**.765**	—	—
Review with client previous homework – praise efforts and troubleshoot obstacles	—	**.748**	—	.360
Assign thought record or daily diary to client (client to record thoughts, feelings/emotions, behaviors/actions)	—	**.579**	—	.331
Agenda setting – articulate & implement a specific agenda for session, identify other issues	.380	**.520**	—	.358
Use of cognitive restructuring with client (thought-feeling model, connect negative feelings to thoughts, challenge thoughts, generate alternative thought, practice alternative thoughts)	—	**.480**	.372	—
Use of a standard measure prior to session to assess client's level of symptoms for the day's session	—	**.398**	—	.327
Address personal safety skills and assertive communication	—	—	**.591**	—
Increase awareness of problem-solving skills and/or social skills	—	—	**.589**	—
Deep breathing exercises or breathing training	—	—	**.571**	—
Explain that processing of trauma memories may continue after the session	.410	—	**.547**	—
Provide progressive muscle relaxation (or provide other progressive relaxation skills)	—	.382	**.501**	.361
Use of guided imagery/imaginal exposure	.345	.401	**.486**	.392
Work on emotion knowledge/affect identification and emotion regulation/modulation skills	—	—	**.439**	—
Help client develop a trauma narrative	—	. —	**.362**	.359
Psychoeducation – provide the client information about traumatic experiences, trauma reactions, symptoms, and trauma reminders	—	—	**.344**	—
I work with my clients to create a graded exposure hierarchy.	—	.364	—	**.882**
I always work through the entire graded exposure hierarchy.	—	.419	—	**.848**
Use of in-vivo exposure	—	.346	—	**.741**

Note. Loadings > .30 shown, with greatest value per factor in bold.

or EMDR?" Each of these questions allowed therapist participants to check either "yes" or "no" to answer the question. One-hundred-sixty-two participants responded that they were trained in CBT only, 30 participants responded they were trained in EMDR only, 102 participants responded that they were trained in both CBT and EMDR, and 22 participants responded that they were trained in neither CBT nor EMDR.

Figure 2 depicts the means across the subscales for type of therapist. Mauchly's test indicated that the assumption of sphericity had been violated, (χ^2 (5) = 111.50, $p < .001$), therefore degrees of freedom were corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .82$) (Field, 2013). The results show that there was a significant main effect of the EST-Q subscales, $F(2.47, 786.27) = 220.00$, $p < .001$. This effect tells us that if we ignore the type of therapist the rating came from, the ratings of the four EST-Q subscales significantly differed (further details of the significant differences provided below). Levene's test was significant for two of the EST-Q subscales [EMDR ($p = .03$) and Both ($p = .01$)], indicating that the assumption of homogeneity of variances had been violated; however, there was a significant between-subjects effect of therapist type as well $F(3, 319) = 21.82$, $p < .001$. This effect tells us that if we ignore the EST-Q subscale rating, different types of therapists (CBT, EMDR, both, and neither) gave different ratings. There was also a significant interaction between the type of therapist and EST-Q subscale $F(7.39, 786.27) = 72.82$, $p < .001$. This effect suggests that the profile of ratings across different types of therapists was different for different EST-Q subscales generally consistent with the hypothesis. Therefore, main effects cannot be interpreted alone, but must be interpreted in the context of the interaction.

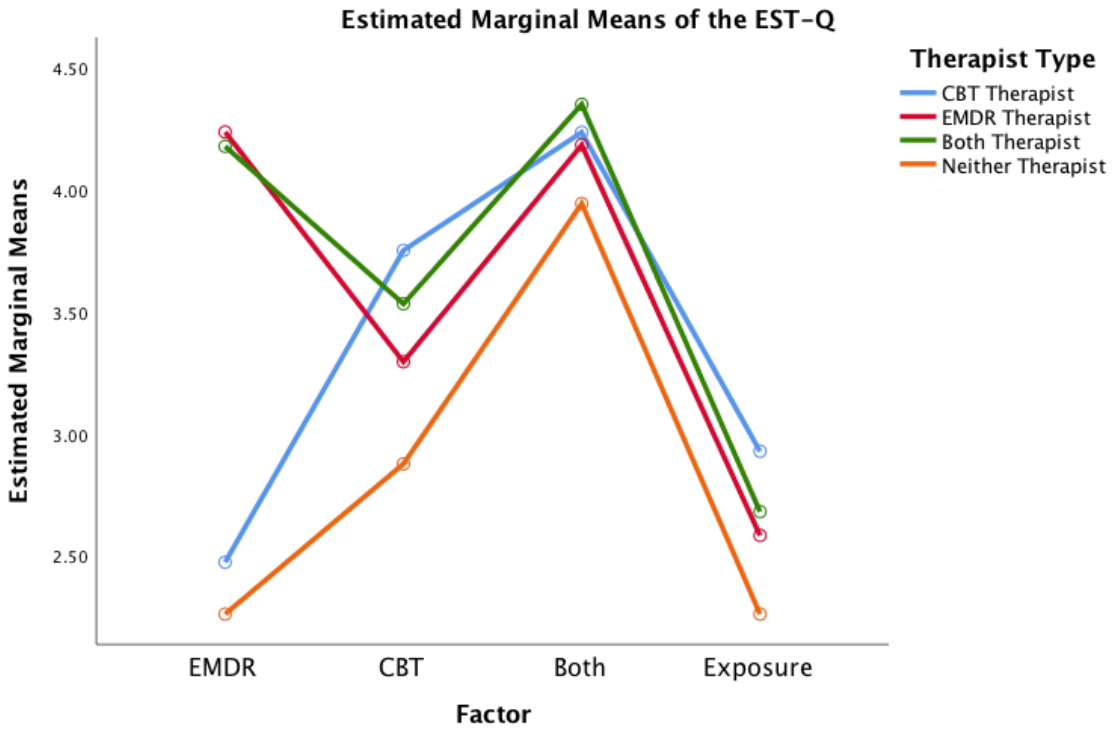

Figure 2. Means across subscales for each type of therapist.

A series of follow up analyses were conducted to decompose the interaction between therapist type and EST-Q subscale. To determine if the hypothesis was supported, a series of ANOVAs were conducted to decompose the between subjects (i.e., do therapist types differ on the different subscales) component of the interaction between therapist type and EST-Q subscale. There were significant differences across therapist types on each of the subscales EMDR subscale [$F(3, 322) = 200.95$, $p < .001$], CBT subscale [$F(3, 320) = 15.04$, $p < .001$], 'Both' subscale [$F(3, 322) = 5.57$, $p = .001$], and Exposure subscale [$F(3, 321) = 4.73$, $p = .003$]. The nature of these differences in subscale score was examined using a series of post-hoc tests contrasting scores across therapist types. Testing was performed using the Games-Howell procedure which accounts for differences in variances stemming from imbalanced group sizes (Field, 2013). Indeed, Levene's test was significant for two of the EST-Q subscales (EMDR and

Both), reflecting heterogenous variance in subscale scores across therapist-types, and further indicating that the use of the Games-Howell procedure was appropriate (Field, 2013).

Table 5. *Descriptive Statistics Including Means and Standard Deviations for EST-Q Mean Subscales by Type of Therapist and Subscale Total Score.*

	Therapist-Type	*n*	*Range*	*M* (*SD*)
EMDR Subscale Mean Total	Any	346	1 – 5	3.17 (1.05)
	CBT	166		2.47 (0.56)
	EMDR	30		4.24 (0.55)
	Both	105		4.18 (0.74)
	Neither	22		2.26 (0.70)
CBT Subscale Total	Any	344	1 – 5	3.58 (0.71)
	CBT	166		3.75 (0.64)
	EMDR	30		3.30 (0.60)
	Both	105		3.53 (0.69)
	Neither	22		2.88 (0.81)
Both Subscale Total	Any	341	2 – 5	4.24 (0.53)
	CBT	166		4.24 (0.50)
	EMDR	30		4.19 (0.50)
	Both	105		4.35 (0.43)
	Neither	22		3.94 (0.81)
Exposure Subscale Total	Any	345	1 – 5	2.76 (0.93)
	CBT	166		2.93 (0.97)
	EMDR	30		2.58 (0.83)
	Both	105		2.68 (0.88)
	Neither	22		2.26 (0.87)

The full results of the post hoc tests of between group differences on EST-Q subscale scores are presented in Table 6. As predicted, EMDR therapists scored significantly higher than CBT ($p < .001$) or "Neither" ($p < .001$) therapists on the EMDR subscale, but not therapists cross-trained in CBT and EMDR ('Both'; $p = .97$). Moreover, "Both" therapists tended to show higher scores on the EMDR subscale than CBT therapists and "Neither" therapists (both $p < .001$). Regarding the CBT subscale of the EST-Q, as predicted CBT therapists reported significantly higher scores than all other type of therapists – EMDR ($p < .01$), "Both" ($p = .05$), "Neither" ($p < .001$). Additionally, "Both" therapists scored higher on the CBT subscale than

"Neither" therapists ($p < .01$). There were no statistically significant differences between the types of therapists on the Both EST-Q subscale. Analyses with the Exposure subscale revealed a higher score in CBT therapists in contrast to 'Neither' therapists ($p < .01$).

Finally, post hoc t-tests were used to compare means between different therapist types on different subscales. Mean scores on each subscale were used to standardize the factors to be measured on the same scale. These analyses showed that EMDR therapists did in fact have higher mean scores on their EMDR subscale than CBT therapists had on their CBT subscale [$t(194) = 3.937$, $p < .001$]. Additionally, therapists who reported being trained in "Both" CBT and EMDR, had significantly higher mean scores on the EMDR subscale than the CBT subscale [$t(208) = 6.583$, $p < .001$], indicating that therapists trained in both CBT and EMDR were more likely to endorse using more EMDR treatment elements more often than CBT treatment elements.

Hypothesis 3: The "Big Five" personality traits – extraversion, agreeableness, openness to experience, conscientiousness, and neuroticism will be related to self-efficacy, anxiety, and use of empirically supported treatment (CBT and EMDR) components.

To test the hypothesized correlations analyses among the Big Five personality traits (extraversion, agreeableness, openness to experience, conscientiousness, and neuroticism) and the constructs of therapist self-efficacy (including subscales of Microskills, Process, Difficult Client Behaviors, Cultural Competence, and Awareness of Values), state and trait anxiety, and the four EST-Q subscales were conducted. Study variables were normally distributed. Means, standard deviations, and correlations for all study variables are presented below in Table 7.

Consistent with predictions, greater levels of neuroticism were strongly related to higher levels of both state ($r = .66$, $p < .001$) and trait ($r = .79$, $p < .001$) anxiety. Also as expected, greater conscientiousness was positively related to job performance, or the participants' perceptions of their job performance (self-efficacy) as measured by the COSE (total COSE:

Table 6. *Within Therapist-Type Comparisons of EST-Q Mean Subscale Scores Using Paired-Sample T-Tests.*

EST-Q Subscale	Therapist Type	Therapist Type	Mean Difference	SE	*p*	Lower Bound	Upper Bound
EMDR Mean	CBT	EMDR	-1.76	.11	.001	-2.05	-1.46
		Both	-1.70	.08	.001	-1.92	-1.48
		Neither	0.25	.15	.34	-0.15	-0.65
	EMDR	CBT	-	-	-	-	-
		Both	0.06	.12	.97	-0.27	0.39
		Neither	2.01	.17	.001	1.55	2.47
	Both	CBT	-	-	-	-	-
		EMDR	-	-	-	-	-
		Neither	1.95	.16	.001	1.53	2.37
CBT Mean	CBT	EMDR	0.46	.12	.003	0.13	0.78
		Both	0.22	.08	.05	0.00	0.43
		Neither	0.91	.18	.001	0.43	1.39
	EMDR	CBT	-	-	-	-	-
		Both	-0.24	.13	.26	-0.58	0.10
		Neither	0.45	.20	.13	-0.09	0.99
	Both	CBT	-	-	-	-	-
		EMDR	-	-		-	-
		Neither	0.69	.18	.004	0.20	1.18
Both Mean	CBT	EMDR	0.04	.10	.97	-0.22	0.31
		Both	-0.12	.06	.15	-0.27	0.03
		Neither	0.34	.18	.23	-0.14	0.82
	EMDR	CBT	-	-	-	-	-
		Both	-0.17	.10	.36	-0.44	0.10
		Neither	0.30	.19	.43	-0.22	0.82
	Both	CBT	-	-	-	-	-
		EMDR	-	-	-	-	-
		Neither	0.46	.18	.06	-0.02	0.95
Exposure Mean	CBT	EMDR	0.35	.17	.18	-0.10	0.80
		Both	0.25	.11	.12	-0.04	0.55
		Neither	0.66	.19	.01	0.14	1.19
	EMDR	CBT	-	-	-	-	-
		Both	-0.10	.17	.94	-0.56	0.37
		Neither	0.31	.23	.55	-0.31	0.94
	Both	EMDR	-	-	-	-	-
		CBT	-	-	-	-	-
		Neither	0.41	.20	.19	-0.13	0.95

$r = .45$, $p < .001$). Additionally, higher levels of extraversion, openness to experience, and agreeableness were significantly related to lower levels of both state and trait anxiety.

These constructs were all also significantly related to higher levels of counseling self-efficacy. That is, therapist participants who rated higher on extraversion, openness to experience, and agreeableness also had lower levels of anxiety and felt higher levels of self-efficacy in their jobs as clinicians. Finally, while extraversion was not related to EST use, openness to experience was significantly, and negatively, related to the exposure scale of the EST-Q ($r = -.13$, $p = .03$), indicating that therapist participants who rated higher on openness to experience personality characteristics also were significantly less likely to use exposure elements. Agreeableness was significantly and positively related to EST use generally ($r = .12$, $p < .05$), as well as the subscales of EMDR ($r = .15$, $p = .01$) and both ($r = .14$, $p < .05$). Agreeableness was significantly negatively associated with the exposure subscale ($r = -.12$, $p < .05$), and not significantly related to CBT ($r = .02$, $p = .69$). Taken together, this indicated that clinicians who are more agreeable were more likely to use ESTs, and EMDR and both specifically, and less likely to use exposure elements of EST's.

To provide more information about the relationship between the EST components (EST-Q subscales) and other therapist factors, regression analyses were used. Each EST-Q subscale (EMDR, CBT, Both, and Exposure) were each entered separately as the dependent variable (for four separate analyses), and therapist factors (personality traits of extraversion, agreeableness, openness to experience, conscientiousness, and neuroticism, as well as self-efficacy subscales, state and trait anxiety, and therapist characteristics such as type of therapist – CBT, EMDR, Both, or Neither, age, gender, years practicing, type of degree – masters or doctoral, and years

since completing their terminal degree) were entered simultaneously as independent variables to predict each of the four subscales separately.

First, relationships between therapist characteristic variables and the EMDR EST-Q subscale were examined. The counseling self-efficacy subscales of microskills (r = .074, p = .037) and difficult client behaviors (r = .094, p = .008) were both significantly and positively related to the EMDR subscale of the EST-Q. This indicated that those therapists who rated themselves as using more EMDR treatment components were also significantly more likely to rate themselves as having more confidence in their counseling microskills and ability to manage difficult client behaviors. Type of training was also related to the EMDR subscale of the EST-Q. EMDR trained therapists (r = .399, p < .001) and "Both" EMDR and CBT trained therapists (r = .663, p < .001) were significantly more likely to also endorse using more EMDR treatment components, while those therapists who reported being trained in "Neither" EMDR nor CBT were significantly less likely to endorse using EMDR treatment components (r = - .072, p = .043). Type of degree held was also related to the EMDR subscale, such that those therapist participants who reported holding a doctoral degree were also significantly less likely to endorse using EMDR treatment components (r = - .118, p = .001).

Next, relationships between therapist characteristic variables and the CBT EST-Q subscale was examined. Years since completing their terminal degree was significantly related to CBT treatment component use, such that those therapists who reported more time since completing their degree were less likely to endorse using CBT treatment components (r = - .132, p = .029). Type of training was also related to the CBT subscale of the EST-Q. Those therapists who reported being trained in EMDR only (r = - .121, p = .046), those who reported being trained in "Both" EMDR and CBT (r = - .136, p = .025), and those therapists who reported being

trained in "Neither" EMDR nor CBT (r = - .296, p < .001) were all significantly less likely to endorse using CBT treatment components. Therapist participant gender was also significantly related to CBT treatment component use, such that men were significantly less likely to report using CBT treatment components than women (r = - .177, p = .004).

Next, relationships between therapist characteristic variables and the Both EST-Q subscale was examined. The counseling self-efficacy subscale of difficult client behaviors was significantly related to "Both" treatment component usage (r = .168, p = .006), such that those therapists who rated themselves as confident in their skills working with difficult client behaviors were also more likely to endorse using the treatment components on the "Both" subscale. Those therapists who reported being trained in "Neither" EMDR nor CBT were also significantly less likely to endorse using treatment components on the "Both" subscale (r = -.195, p = .002). Finally, gender was a significant predictor of the both subscale, such that men were less likely to endorse using the treatment components on the "Both" subscale than were women (r = - .152, p = .014).

On the Exposure subscale of the EST-Q, there were no significant therapist characteristic predictors. See Appendix I for full regression analyses details and tables.

Hypothesis 3a: Higher levels of anxiety and lower levels of self-efficacy will be related to less CBT and EMDR components usage.

Results are presented in Table 7 and some are further described below. Those with higher levels of both state and trait anxiety had significantly lower levels of counseling self-efficacy. State anxiety was not related to use of EST elements, while trait anxiety was significantly and negatively related to therapists' use of EMDR elements (r = -.20, p = .001) and use of EST elements generally (r = -.20, p = .001). That is, therapists who endorsed more trait anxiety also endorsed significantly less use of EST elements and EMDR components specifically. Total

counseling self-efficacy was positively and significantly related to total EST use ($r = .24$, $p < .001$) as well as the EMDR ($r = .24$, $p < .001$), and "both" ($r = .18$, $p < .01$) subscales, but not the exposure or CBT subscales. That is, therapists who endorsed more counseling self-efficacy, or confidence in their own counseling skills, also endorsed more use of EST's generally and EMDR components specifically.

Additional Survey Results

The online survey contained several qualitative questions that allowed participants to respond in their own words to certain questions. Below, I briefly provide a few common themes found in this qualitative data which add to the main results from the 346 participants who completed the survey. Additional information and results are provided in Appendix F.

A set of open-ended questions in the survey asked therapists about how they diagnose PTSD in their clients. As reported above, 174 participants (53.87%) answered that they did not use a structured questionnaire to diagnose PTSD in a client, while 149 participants (46.13%) said that they did. A qualitative question provided more details about how therapists were making PTSD diagnoses. Overwhelmingly, therapists reported that they were using DSM-5 criteria to diagnose PTSD in their clients (n = 120). Another common response was that therapists use "symptoms" to diagnose PTSD in their clients ($n = 61$). Thirty therapists stated that they rely on client self-report in order to make a diagnosis and six therapists stated they use the "narrative" for PTSD diagnosis. Several therapists also stated that they used an "interview" ($n = 16$) to diagnose PTSD in their clients, while eleven therapists specifically stated they used a "diagnostic interview," and thirty-eight more stated they used a "clinical interview." "Assessment" was another common response to ($n = 24$), and six therapists stated they used "intake questions," while twelve therapists stated more specifically that they used a "biopsychosocial assessment."

Table 7. *Means, Standard Deviations, and Correlations of Study Variables*

	Mean (sd)	n	Openness	Conscientiousness	Extraversion	Agreeableness	Neuroticism	Micro-skills	Process	Difficult Client Behaviors	Cultural Competence	Awareness of Values	State Anxiety	Trait Anxiety	EMDR	CBT	Both
Openness	39.41 (5.88)	289	-														
Conscientiousness	37.54 (5.63)	289	.03	-													
Extraversion	27.96 (6.37)	291	.29***	.13*	-												
Agreeableness	38.54 (4.39)	289	.22***	.28***	.18**	-											
Neuroticism	19.24 (6.03)	289	-.29***	-.40***	-.35***	-.49***	-										
Micro-skills	62.56 (6.22)	253	.17**	.39***	.22***	.42***	-.43***	-									
Process	48.51 (8.19)	252	.16*	.35***	.20**	.28***	-.41***	.50***	-								
Difficult Client Behaviors	33.64 (5.00)	259	.14*	.31***	.23***	.28***	-.38***	.40***	.59***	-							
Cultural Competence	20.05 (3.15)	250	.15*	.25***	.16**	.30***	-.33***	.45***	.44***	.36***	-						
Awareness of Values	19.36 (2.83)	250	.09	.32***	.06	.33***	-.25***	.32***	.39***	.25***	.40***	-					
State Anxiety	31.32 (8.92)	289	-.22***	-.42***	-.23***	-.39***	.65***	-.39***	-.37***	-.36***	-.25***	-.18**	-				
Trait Anxiety	33.78 (8.63)	286	-.25***	-.51***	-.31***	-.41***	.79***	-.42***	-.41***	-.37***	-.36***	-.26***	.75***	-			
EMDR	3.17 (1.05)	346	.12	.13*	.06	.15*	-.21***	.19**	.10	.20**	.25***	.20**	-.09	-.20**			
CBT	3.58 (0.71)	344	-.10	.07	.11	.02	-.07	.13*	.04	.15*	.10	.06	-.06	-.09	.16**		
Both	4.24 (0.53)	341	.07	.09	.11	.14*	-.10	.13*	.07	.24***	.20**	.11	-.11	-.11	.37***	.43***	
Exposure	2.76 (0.93)	345	-.13*	.02	.01	-.12*	-.01	.06	.07	.14*	.04	-.02	-.01	.02	.09	.43***	.36***

Twenty-nine therapists stated they diagnosed PTSD when the client had a history of trauma and fourteen therapists stated they evaluated for trauma's impact on the client's life. Eleven therapists said they used a behavioral observation for PTSD diagnosis. Many therapists (n = 27) mentioned that they use a "standardized measure" to diagnose PTSD in their clients and several provided instrument names. The most commonly reported measure was the PCL-5 (*n* = 37), followed by the UCLA PTSD index (*n* = 7), CAPS (*n* = 7), ACE's (*n* = 3), MID (*n* = 2), PTSD checklist (*n* = 3), LEC (*n* = 3), IES-R (*n* = 3), trauma symptom checklist (*n* = 3), CPSS (*n* = 2), MMPI-2 (*n* = 2), MINI neuropsychiatric interview (*n* = 2), and SCID module (n = 2). Ten therapists mentioned that they looked at collateral information, such as reviewing client records or speaking with a child client's caregiver, to make a PTSD diagnosis. Finally, three therapists said they use the client's "initial presentation" and nine different therapists stated that they used their own clinical judgement in order to make a PTSD diagnosis for their clients.

Additionally, a qualitative survey question asked participants, "How do you decide to focus on PTSD symptoms or trauma exposure for a certain client?" Overwhelmingly the most popular response was that therapists decided to focus on trauma or PTSD symptoms based on the client's symptoms, symptom presentation, or current functioning (*n* = 78) and, relatedly, how much those problems were trauma-related and interfering with their clients' lives, such as their relationships, work/school functioning, etc. (*n* = 46). Many therapists also used the term "meeting the client where they're at," and discussed that the client deciding to focus on their PTSD or trauma symptoms was equally important to them. Fifty different therapists answered that they decided to focus on PTSD or trauma symptoms for a client based on their clients' goals or needs, while another 40 therapists stated that they have a trauma focus only if their client decides, prefers, and/or is willing to work on their trauma symptoms. Relatedly, 39 therapists

mentioned that their focus on PTSD or trauma symptoms relied on their clients' emotional stability, coping skills, and/or readiness to process their trauma. Sixteen therapists in the survey stated that their clients came to their practice because of its focus on trauma, while eight therapists surveyed said that they do not focus on trauma and mentioned referring clients to other clinicians in this instance. Eleven different therapists mentioned that they believe trauma underlies most problems or that this is the lens through which they see their clients. Finally, eleven therapists said that they focus on trauma for a client because of their own clinical knowledge and/or training and did not mention any diagnostic tools or formal assessment.

CHAPTER 9. QUALITATIVE INTERVIEWS

Research Question

Qualitative interviews were conducted with practicing community therapists. For these interviews, I framed my interview questions (please see Appendix G) around my research question: **What are the experiences of therapists who use components of the empirically-supported treatments Eye Movement Desensitization and Reprocessing (EMDR) and Cognitive Behavioral Therapy (CBT)?**

Method

Interviews

The investigator conducted approximately one-hour long interviews with practicing community therapists. Participants for this subsection of the study were recruited from the online questionnaire (detailed description of recruitment methods provided above).

Therapists were asked to set up a mutually agreeable time for the investigator to come to their office, meet at a mutually agreeable location like a coffee shop, or to come to the investigator's office on Iowa State University's campus to participate in the interview. For those therapists not in the Central Iowa region, a remote video or phone interview option was offered. An additional informed consent with information specific to the interview protocol was obtained from all participants before the interview began. Those participating in the interview virtually were sent the informed consent document ahead of time and asked to send it back signed and to discuss any questions with the PI before beginning the interview. With permission of the participant, the interviews were recorded (audio only) so that the investigator could later transcribe the interview and analyze the data collected from the interviewee. The questions the investigator asked in the interview (Appendix G) ask about what kind of treatment modalities the

therapist utilizes, how they choose the right treatment modality for each client, and what parts of the treatment they use (or all of it) in what order. The investigator sometimes also asked generally about how the participants' clients responded to the treatment, however, the interviewer did *not* ask for any identifying characteristics of clients.

The Iowa State University Office for Responsible Research's Institutional Review Board has approved this portion of the study.

Participants

Nine of the therapists interviewed identified their gender as female and one identified their gender as male. Eight therapist interviewees identified their race or ethnicity as White, one identified as Asian, and one chose to self-describe their racial or ethnic identification as "Eastern European Discent [sic] (White is not an ethnicity; race and ethnicity are two different things)." The interviewees ranged in age from 25 to 63, with a mean age of 42 years. Five of the therapists interviewed reported being licensed clinical social workers, or an equivalent naming for their state. Two interviewees were licensed professional counselors, one was a licensed psychologist, and two chose "other" and described their license as "LMHC" (licensed mental health counselor) and "LMSW" (licensed master social worker). Nine of the therapists interviewed held a master's degree and one held a doctoral degree.

The therapists interviewed were located and licensed in Iowa, Louisiana, Ohio, Pennsylvania, Texas, Utah, and Virginia. Four therapists were located and licensed in Iowa, and two of the interviews with therapists in Iowa were conducted in person, while two were conducted via video conference (Skype or Zoom). All other interviews were conducted via video conference due to the distance of the interviewee from the interviewer.

Four interviewees had been practicing as a therapist for five years or less. Of those four, two had been practicing for one year, one had been practicing for two years, and one had been

practicing for four years. Two interviewees had been practicing for six to ten years, one had been practicing for 11 to 15 years, and three answered that they had been in practice for 35 years or more. All but three interviewees had completed their graduate degree 10 years ago or more. Two of the therapist interviewees checked that their primary employment setting was a community clinic or agency, seven were in private practice, and one listed their primary employment setting as other and described it as "outpatient VA clinic."

All ten interviewees answered that they see clients who have experienced trauma. The therapist interviewees saw between 16 and 35 clients per week on average for a mean of 25.5 clients per week, with three therapists seeing 25 clients per week. Nine of the therapist interviewees primarily saw adult clients, while one primarily saw adolescent clients.

Qualitative Data Analysis

The interviews conducted for this study were digitally recorded and stored on a password protected, encrypted computer and then transcribed by the transcription service Rev.com. After receiving the interview transcripts from Rev.com, I read over the transcript while listening to the audio to ensure accuracy and correct any mistakes in the transcription. Themes from the interviews were discerned both within and between therapists. Transcriptions include everything said by both the interviewer and the participant, including laughter, pauses, and other identifiable noises. Additionally, field notes were taken by the interviewer. These include any important contextual clues that may not be apparent in the transcription, such as tone, affect, feeling of the interview, any discomfort or other feelings experienced with any questions during the interview, body language, etc.

I framed my interview questions around my research question, **what are the experiences of therapists who use components of the empirically-supported treatments Eye Movement Desensitization and Reprocessing (EMDR) and Cognitive Behavioral Therapy (CBT)?**

Some additional interview questions were follow-ups to the questionnaire participants were asked to fill out ahead of the interview (described in the quantitative section above). For example, a therapist who indicated they used CBT to treat clients who have experienced a traumatic event, but did not use exposure sessions, would be asked why they omitted exposure, with the goal of better understanding how they make decisions about empirically-supported therapeutic components for their clients. Interview questions were framed so as to avoid the appearance of bias on behalf of the interviewer.

Qualitative data was analyzed using an inductive coding approach, guided by grounded theory (Field, 2013). Grounded theory is the "discovery of theory from data" which can be "systematically obtained and analyzed in social research," (Glaser & Strauss, 1967) p. 1). A complimentary, systematic methodological approach to understanding qualitative data described by Willms and colleagues (1990) was also used. Beginning with interviews and field notes taken during interviews, I then used "Coding Consensus, Co-occurrence, and Comparison" to identify themes in the interview data (Willms et al., 1990). Looking at the data from all the interviews conducted, I identified patterns and similar statements across therapists interviewed, especially those issues and themes that seem to apply to all or a majority of participants. I have developed a list of words or phrases gleaned from the interviews and field notes, which include themes, issues, actions, cultural determinants, and symbols relevant to therapists' experiences with EMDR and CBT. Each of these "codes" found in and across interviews was defined and organized into larger themes. Specific quotes are used to help illustrate each theme. This type of qualitative coding has been used in previous qualitative psychotherapy research (Palinkas, 2014; Reding et al., 2016; Willms et al., 1990). This methodology allows for the accommodation of both a priori and emergent themes in qualitative data. Willms and colleagues (1990) argue that

this methodology, or systematic approach for using qualitative data and analysis in research, is an essential precursor to culturally effective interventions in clinical and community settings. Therefore, this is an excellent fit for the type of data gathered in this dissertation.

CHAPTER 10. QUALITATIVE INTERVIEW RESULTS

Qualitative Research Question

What are the experiences of therapists who use components of the empirically-supported treatments Eye Movement Desensitization and Reprocessing (EMDR) and Cognitive Behavioral Therapy (CBT)?

Central Themes

The data gathered in qualitative interviews found 14 a priori themes based on the questions that I asked the participants, as well as 14 different emergent themes coded in the data. The complete list of all 28 themes can be found in Appendix H. In this section, I briefly discuss themes that help illuminate, or provide more information to better understand, the quantitative data. A priori themes discussed in this chapter include: 1) What kind of treatment modalities do you utilize? 2) How do you choose the right treatment modality for each client? 3) Do you use exposure sessions when treating clients with trauma exposure/PTSD? Emergent themes discussed in this chapter include: 1) Single incident vs. complex trauma [and/or Big T (Trauma) vs. Little t (trauma)], 2) EMDR vs. exposure sessions/therapy, and very brief discussions of 3) EMDR vs. CBT, 4) Money commitment in EMDR, and 5) Thought EMDR sounded "crazy."

What kind of treatment modalities do therapists utilize? How do you choose the right treatment modality for each client?

All therapists interviewed checked that they are trained in both CBT and EMDR in order to be eligible for the interview portion of the study. I also asked each interview participant more about what other types of treatment modalities they use with clients to get a better picture of what they are doing in their offices. Most therapists that I interviewed responded that they use multiple treatment modalities, with a few describing themselves as "integrated." One said, "Everything is integrative you can't just use... No. I do not just use one modality."

There is a perception that once a therapist is trained in EMDR, that is the only modality that they use. While some therapists I interviewed were very loyal to using EMDR, most stated that they do still have other modalities that the use. “I mostly use EMDR, but I weave in some of the CBT tools,” one therapist told me. Another said, “I use a lot of interpersonal stuff. I think that’s probably one of my favorites. I use narratives sometimes. I’ve used trauma focused-CBT, but not as much. I use ego state. Solution-focus.” A few therapists mentioned other modalities that focus on sensations in the body. One stated, “Apart from the CBT and EMDR, I use a lot of body centered approach it's like a sensory motor.”

One therapist said:

> I am truly that integrated therapist. I can speak the different languages and understand which ones we're doing. I used to sit with a CBT therapist and she and I would talk. We were like, “We're doing the same thing.” She goes, “Yes, we're using different language.” ... We would talk about what's the most important part of therapy and what makes it work: the relationship and trust. You have to be willing to sit with them. Then of course there are specific tools you use to get there.

One therapist beautifully summed up why most therapists answer that they are “eclectic” or “integrative.”

> I think for me personally, EMDR had been definitely a better fit, but I have seen success with TF-CBT. I have seen success with cognitive processing therapy. But I am much less likely now to say that I am eclectic than probably I was when I got out of grad school. I'm much more likely to say different things work for different people. And so, my responsibility is to help you figure out what I can offer that might work best for you or to

> help you find someone that might be able to offer something that works better. But I don't think any one intervention fits for everybody.

Another therapist, who also considered themselves a specialist in EMDR, said something very similar during their interview.

> You're going to do different things depending on the issue that presents and what someone wants to do... The most important thing is the relationship... Everybody knows it has to be a good fit. Then we can decide which treatment we want to use.

Most therapists agreed that choosing a treatment modality would depend on their client – client characteristics as well as their goals for therapy. One therapist said:

> Well it totally depends on the client... it depends on their goals. I do a lot of trauma work and so a lot of times, well, I don't know – like framing negative self-statements for example – I might have that as a goal, we might agree on that as a goal, to you know increase their level of positive self-statements... With just clients that I saw yesterday, I saw six people, six women, who were in domestic abuse situations yesterday and then three with other concerns. And so, changing their view of... increasing their self-efficacy, for example, would be a goal. Decreasing their self-criticism... increasing their assertiveness, and then we might move into other things like, well, this wouldn't really be CBT but behavioral, improving their sleep hygiene, improving their medication compliance, and strengthening their ability to disconnect from their husband and conflictual situations. So all those things would be woven in depending on the circumstance.

How do therapists decide what treatment modality to use? While certainly most acknowledged that it depends on a client's goals as well as their characteristics like readiness to

confront their trauma, coping skills, and support, some therapists were very loyal to one treatment modality or another. Through these interviews I learned that some therapists make the decision on what modality to use for a certain client primarily between CBT and EMDR.

> It depends on how much they believe the past is still affecting them. Like if they know this junk is still haunting me and I tell them about EMDR, they're like, "Yeah! Let's do this!" But the people who don't... If I feel like they're not even going to be willing, I probably don't even approach it and I just start using CBT.

Another therapist stated they use CBT for:

> your basic depression, anxiety, and... things like that, as well as with complex trauma. I use CBT kind of as a jumping off point, before I start EMDR. I use it in conjunction with DBT and a couple of other things, kind of to give clients the skills that they need to be able to make it through EMDR.

Another stated, "CBT you know I – you intermingle that kind of often with all clients unless they just need processing support. For EMDR I have some clients that are specifically seeking EMDR. And then if they're ready you can work them through that." But how do therapists know when a client is ready for EMDR? One therapist put it well when they said,

> I always want to know how much emotional regulation skills they have first. Because if I feel like they can't even manage a bad day, then working through a bunch of crap is not going to be so great. Though, that's when I do the skill building, but if they tell me, "I've been in therapy before, these were the coping skills I know when I'm feeling crappy," whatever, then we can just jump in right away 'cause all that other work's done.

I would conclude that overall, the therapists I spoke to who are trained in EMDR want to use that modality with their clients who present with symptoms of PTSD or who have a trauma

history. However, they cannot use that modality if the client does not have some coping skills to rely on while processing the trauma. CBT is almost a starting point for many therapists to then jump into EMDR, especially for those working with clients without a lot of resources. One therapist stated that clients were a good candidate for EMDR if they were "stable, they're not dissociating… substance abuse is not out of control, like they're not full blown in addiction."

Do you use exposure sessions when treating clients with trauma exposure/PTSD? And EMDR vs. Exposure Sessions/Therapy

One question that I wanted to delve into deeper with the interviewees was the finding that so few trauma therapists were using exposure therapy or exposure sessions. I discussed this with nine out of the ten therapists interviewed, and all nine of those with whom I discussed their use of exposure therapy stated that they did not use exposure therapy in their practice. Their reasons varied, but many said something along the lines of one therapist who said, "EMDR works a lot better than that." Another therapist discussed a similar opinion saying that they don't use exposure sessions or CBT for trauma and PTSD anymore because they found that EMDR was just better for the complexities of the cases they were seeing. This therapist discussed the intensity of the trauma their clients had and the fact that the trauma was not from a single event but a multitude of events. They found that sexual trauma, especially childhood sexual trauma, was especially difficult. Another stated,

> No. Certainly if I work with somebody who has a phobia, even with EMDR with a phobia, there's an aspect of now you need to go do the phobic thing or see the phobic object. So there's that aspect of exposure, but not exposure therapy.

Another participant's response had a similar theme:

> Most of the clients I'm seeing have that complex trauma, like I said, where there's past abuse or neglect or abandonment, things like that. And so... yeah, unless I'm going to force them to talk to their parent who they're not allowed to actually have contact with...

Another therapist felt similarly about the clients they saw saying:

> It's just not a tool that's appropriate. So nobody comes in for exposure. How do I learn to adapt to, 'My husband's beating me?' How do I learn to... I mean I do use the EMDR flash technique, for intrusive memories of incest that are too distressing so we'll do the tappers and the prep and the flash and the rating of numbers, but I weave that into what's going on at that moment when that person had a dream about a certain situation that's triggered by them, not by me.

One therapist participant gave a better picture of how they feel that EMDR works better than exposure therapy for the treatment of trauma exposure and PTSD. "No, I actually would say I personally do not do exposure therapy. I don't walk with them to the airport. Instead I use people using their mind, walking through the movie, but that's when I pull in EMDR."

One therapist participant felt particularly strongly about not using exposure sessions for trauma survivors in their practice. When I asked them about using exposure sessions they stated, "BIG OLD NO, EMPHATICALLY NO!" When I asked why not they stated:

> I tell all my clients, "Do not feel obligated to share a painful thing," and to not think it's necessary to in order to heal or feel better whatever you call it. And that's just because for a lot of the clients here, particularly my caseload, it's not just your one or two traumas it's, it could be a lifetime of traumas. And so I've seen a lot of people even just maybe starting to share a story because that's what they think there is - almost just immediately flood and just become overwhelmed emotionally. So I feel that by me emphasizing you

> don’t have to share painful stuff, unless you want to that gets more buy in of sorts as well as the people who perhaps I don’t emphasize that to I’ve noticed some uh their lack of follow thru or just not coming back.
>
> They continued saying:
>
> And I’ve had quite a few clients who have done some - what sounded like some exposure work - and while they have noticed perhaps some relief in certain aspects, in that moment when they were doing it, it was not fun at all and that emotional memory of therapy not being fun is another pretty big barrier to people coming in to seek services or maintaining sessions.

I found that many therapists I talked to saw clients who had many barriers to coming to or continuing to attend treatment for trauma. Anything that may further impede them coming into therapy is not desirable and the therapists try to avoid in order for clients to return for further services and get the help that they need. Another therapist brought up a similar topic, saying they don’t use exposure sessions because:

> Sometimes I don't get that far. Their follow through is not good enough to get to that place. The cognitive processing therapy folks that have intentionally signed up for that piece have been a little more amenable to it. But often it's been that they don't stick around that long. They get to feeling a little bit better and they take off before we get to that part... I have trouble sometimes getting a narrative that it seems would actually be helpful to them, not a three sentence, "I went to Vietnam. It was horrible. I came home and it was horrible." Getting a longer, more meaningful narrative.

Some therapists that I spoke with offered other alternatives to using exposure sessions with CBT, and alternatives to using EMDR. One said that they did not use exposure sessions,

and that “usually when they’re, clients that have trauma that’s significant enough that it’s impacting their daily life and I’m not using EMDR for whatever reason... I tend to also to use internal family systems more than CBT.” Another differentiated between using “prolonged exposure” and what they termed “cognitive exposure,”

> Not prolonged exposure. I do a little bit of cognitive exposure with a trauma narrative. And doing that, if they choose to do that or the amount of exposure that they get in EMDR depending on what they're working on, but not an intentional exposure.

Being asked about a component of CBT led the therapists interviewed to compare exposure sessions of CBT to EMDR directly. In particular, some of the descriptions of how EMDR worked “better than” exposure sessions sounded more like imaginal exposure to me. I asked some of the therapist participants more about this. One participant thought that EMDR was the same as imaginal exposure, “...you have imaginable exposure, you have in vivo exposure, so EMDR is all imaginal exposure, which to me is just as profound as being there actually, in fact, I’ve noticed that our imaginations are way more real than reality sometimes.” I also asked this therapist more about how EMDR may be like exposure sessions. Their answer included information about the graded exposure hierarchy:

> It’s more targeting memories so you know you find your touchstone, or you know the “worst” are the first, whatever, all the other memories that are kind of in the same vein, yada, yada, yada and so we start with the touchstone or the “worst” from there and I let the client decide which one they want to do next. So in a way that’s kind of a hierarchy and in a way it’s kind of not.

Another therapist also felt that EMDR was exposure therapy. They said, “Well, you can't do EMDR without having exposure sessions, and TF-CBT has the trauma narrative, which is

considered exposure, as well. I build up to that. That's not session number one. But yes, eventually in the process, that's the goal." This therapist wanted to use exposure sessions when using CBT and thought of EMDR as exposure and had a goal of using these modalities with their clients. This same therapist, however, stated that they did not need the person to give all of the details of the traumatic event in order for EMDR to work.

> I don't need to know it for it to work. The exposure has nothing to do with whether or not I know it. Whether or not they say it to me, whether or not they tell it to me, I don't need all the nitty gritty details for EMDR to work... The client knows what it is. It doesn't matter if the therapist knows what it is. I don't need to know the details. The client's getting exposed to it inwardly, in their thoughts and in their experience of the memory. Whether or not they're saying all the nitty gritty details to me is irrelevant. What's crucial, though, is that the client is actually going there. You know. If they're saying it, but you know, if they're saying, "Yeah I see it in my mind, yeah I'm thinking about it," they're giving me things that they're observing, that kind of thing, but they're not actually going there, well then we're not doing exposure. It's sort of about teaching the client how to do the work.

This therapist went on to directly compare EMDR and CBT with exposure sessions:

> What I like about EMDR's approach over TFCBT, is that I think it is less intrusive. The client is in the driver's seat, so they get to set the pace. They can press pause whatever they need to, and they have the ability to decide how quickly they want to go through it. With the trauma narrative, it doesn't give the client the ability to set the pace as easily. And in the TFCBT protocol, there's oftentimes a sharing of the trauma narrative with a loved one or a trusted individual. And that sometimes can be really intrusive. So there's

that part. And the nitty gritty details of every aspect of the trauma, that's not always available. So a trauma narrative, especially something that happened if the trauma's from pre-verbal, you're not going to be able to write about it, because you don't have cognitive memory of it because you weren't cognitive then. It's incomplete, I think, and it's intrusive. I prefer the EMDR approach, because it leaves the client in the driver's seat and it allows you to work with the parts of the memory that are necessary to reprocess, without going into more than is really necessary. And you don't have to have the whole story in order to be effective.

A different therapist had given a lot of thought to whether or not EMDR was a type of exposure therapy:

Well I've thought about whether it's an exposure therapy, and I can kind of see why people would say it is, because you're doing in vivo exposures if you will, or imaginal ones, so they're imagining it while you're in session. I can see how it can be seen as an exposure for anxiety. Because with anxiety or even OCD, you can do future templates where you can think about what's the worst-case scenario and then they can imagine that scenario and how they work through it mentally and work through all the emotions. That's how they can, and it actually can impact them in a positive way. So I can see why people would say, because that is an exposure, that is an example of an exposure.

But I went to a training recently that really helped me clarify this more, especially that thought of EMDR is just another subset of CBT, it's just an exposure therapy basically, or you know, kind of a reduced exposure therapy, not going into it too much, you're not flooding them, but it is exposing them. But I really loved the training because it really, actually it was Francine Shapiro talking about EMDR as an actual therapeutic model. Not

> just a protocol. Not just a CBT protocol, but an actual therapeutic framework and how do we view EMDR like we view psychodynamic theory? Or all these other theories that we learn about in grad school, how can we use EMDR as a framework for the work, not just as this is just another protocol that's falling under CBT.
>
> So since then I compare it, like there's a lot of overlap to EMDR but it's because I think what I would say to somebody who's arguing it's just an exposure therapy, I would say yes, I would see why you see that because there is kind of some overlap, but EMDR is not encapsulated in only that future template, so that's one aspect of it. But we're doing EMDR in our framework the entire time from the moment the client comes in because our perspective is really on seeing diagnosis even, it's seeing the experience that clients are going through as their unprocessed memories that they have in their minds.
>
> And because of these unprocessed memories, it's impacting their actions and thoughts in the way that clients are in the present. And so if we only just limit EMDR to just manual in the sense of it's just that, then I think we're really underestimating what EMDR is. If you just stress the eye movements or whatever.

One reason many therapists gave that EMDR and imaginal exposure were not the same was that in EMDR the client only has to give the therapist a picture or name of the event, and they do not have to go into details about the traumatic event, as they would need to do with exposure. Here are some ways that the therapist participants elaborated on this idea.

> Well to target [the memory] they have to just give me a brief bullet point of what that memory is. But once they're working through it in their own mind, I don't really need to know what's actually happening with the memory, I just want to know what's changing with the picture... What's going on in their body with their emotions. So they don't have

> to tell me the whole memory – they don't even have to tell me most of the memory just a smidge and the rest is up to them.

One therapist was more adamant that EMDR is not exposure therapy for this reason – that the client can give the name of the picture and in fact is asked not to go further into the traumatic event.

> So first of all, when you're doing your history, you're taking in your assessment, you know I was trained, you know you're very careful to not have people describe the trauma then. You frame it like, "You can give me a cue word or you know one sentence..." We're not going to, we're just going to title it, we're not going to go into that trauma now. So you're very, of course things could be triggering to clients when you're assessing them, but you're very careful, I'm very careful not to re-traumatize them during the assessment phase. And then, again how I was trained and what I was told is it's not exposure therapy, because that's the whole point of the bilateral stimulation is you're keeping them grounded in the present, so that they're fully online in the present. I mean and sometimes it's hard to tell so you've got to really pay attention. So they've got one foot here in the present safely here and then one foot back in the trauma and so it's not like exposure therapy, they're not going fully back in. They're kind of dipping in and then coming back, so it's very intentionally not exposure therapy, in my opinion, and training.

Another therapist described this as asking clients for a "book title" about their traumatic event:

> I tell people that for the events on the target sequencing plan to just perhaps think of giving me the, kind of saying it like the title of a book, you know – "I Got Punched," or

whatever. And then when we target something, I tend to ask people to just let me know perhaps the part that represents that moment the most or the worst part.

When I asked therapists whether or not their clients who were using EMDR for trauma exposure did end up telling them more than just a name or picture, many responded that their clients do end up telling them more about the traumatic event. One said:

> Most of them do... I think it's in a way comforting for them to know that someone else knows what happened. And I've also noticed that as they process they say, "What's different now?" They'll be really descriptive about everything that happened each time. They don't have to be, but they choose to. So in a way I'm hearing the whole memory with that as well. But if all I know is, "I was date raped," Cool – that's all I needed to know. It's easier on me actually.

Another therapist spoke more about how they prepare clients so that they know they do not have to talk extensively about their trauma. Some therapists feel that this should be emphasized more for certain clients:

> It's totally up to the client, it's very individual. And so I say to them, you can say as much, you know... The directions say, you know the script or something and I use a lot on script because I like it, the one that I was trained on. I think it says you know between sets, "Please tell me as clearly as possible what is happening for you?" But a lot of that is what are you noticing in your body, what feeling is coming up for you? And so I think for people that are like super traumatized and very avoidant about talking about the subject material, I think I take extra care to say, "You don't have to tell me what you're seeing, you know, I just need to be checking in with you about... You know you can say, 'I'm seeing the same thing or the image has shifted.'" Or so if people that are really avoidant

about it, or have a lot of shame about talking about it, I'm even more clear with them, "You don't have to verbalize exactly what's happening in that picture."

My hypothesis about this idea that in EMDR you do not have to talk about the memory itself, but many clients do, if that if you are coming to therapy, you probably want to talk about the event or at least expect to have to talk about it.

Single Incident vs. Complex Trauma: Big T (Trauma) vs. Little t (trauma)

One theme I found in this interview data was therapists commenting on trauma itself. That is, several different therapists independently, and without a question prompt from me, talked about how prevalent and common trauma is in their clients' lives. One said, "I think that life has a lot of trauma exposure in it, generally. So, if we talk about big T trauma and little t trauma, everybody has trauma." To clarify, "Big T" (Trauma) and "little t" (trauma) trauma are terms that Francine Shapiro uses in her training for EMDR (Shapiro, 2001). Perhaps the therapists I spoke with have more of a trauma lens, and therefore do see, or at least believe that they see, trauma in their clients more frequently. One said, "I see everything, but I find that a lot of things are rooted in trauma because that's the lens I see things." Another therapist stated trauma exposure is pervasive on their caseload as well, "I would venture a guess that at least 90% of my caseload has been through traumatic events. And I think the stats, or, I think roughly about 66 or 70% of people in outpatient treatments have experienced trauma as well." This therapist believes that even therapists who do not specialize in trauma treatment see an extensive amount of trauma exposure in their clients. Another therapist stated, "I'm in private practice, so I take pretty much whoever comes my way. But it's pretty rare that I encounter someone who doesn't have some sort of trauma, whether it's full blown PTSD... There's oftentimes some traumatic experience there." This therapist clarified in EMDR terms as well, saying, "I see lots of

people with small T traumas, not full on PTSD, but a lot of small T traumas, because I think we all do, personally."

Further, many therapists discussed trauma in terms of single incident trauma compared to complex trauma, which became its own theme in my data. This can be seen in many of the other themes and questions explored in the qualitative data above. In fact, seven of the ten therapists I interviewed directly addressed this topic, even though it was not directly related to an interview question that I asked them, although many of the interviewees brought up the topic in response to my questions about how long different therapies take to see some results in their clients. Most of the therapists, especially those who had been in practice for a few years, had seen a client who had single incident trauma, but they were very much the exception in their practice. One therapist said, "Most people have piles of different trauma. I have one teenager that had one trauma and it was, they're easy to clear out and make progress. Most people are complex and harder." Another therapist had a similar story about a case with single incident trauma who was a rape survivor. They said, "That's unusual in my practice. That's not a typical client for me. I have more long-term cases than short-term cases... I'd love to have some of those short ones. It was really fun. But I don't get a lot of that." Some therapists felt that clients with complex trauma were not only the norm for their practice, but those clients were sort of used to trauma in their lives. This was an important consideration in their treatment.

> I tell all my clients do not feel obligated to share a painful thing and to not think it's necessary to in order to heal or feel better whatever you call it. And that just because for a lot of the clients here, particularly my caseload, it's not just your one or two traumas, it's, it could be a lifetime of traumas... A lot of my clients tend to cope well enough as is and

> them kind of having lived through many traumatic events they, I mean, that's kind of their threshold of normal.

This again brings up the idea of "big T" and "little t" trauma. Some therapists who thought of clients with single-incident trauma thought that those clients would not necessarily qualify for a PTSD diagnosis (perhaps how some would label a little t trauma), but still experienced an upsetting traumatic event in their lives that they wanted to process.

> With one [person]... They had no history of trauma, but they were in an abusive relationship and they were able to resolve that within six sessions... I wouldn't say that person had PTSD per se, but a lot of trauma reactions. But for anybody in my experiences who's gone through extensive sexual violence, sexual trauma, especially childhood sexual trauma, or if they've been adopted, gone through foster care, or if they've been in a lot of ongoing traumatic events, situations throughout their whole lives, potentially then to the point where they have dissociation going on, those situations, I feel like it's hard to put a timeline but it's definitely more than just a few months. I'm guessing probably they're going to be in therapy for longer than a year, for sure, to work through everything.

Complex trauma is so prevalent that one therapist stated they could not think of any clients that had a single incident trauma. "I'm thinking, if there's any that don't [have complex trauma] ... and if there are, they're not coming to mind." Another therapist also could not think of any examples of a single-incident trauma.

> Honestly, in all my years of practice, I don't think I've ever seen anybody that just had one trauma. They don't end up in therapy because they saw one thing. Unless maybe they're in some sort of a structure, like in a police situation where they're doing debriefing, but they don't end up seeing a psychologist in individual psychotherapy. As a

result, yes, all of my clients have had multiple traumas, frequently multiple extreme traumas.

Barriers

When starting this project, one of my main goals was to get a better understanding of what was actually happening in therapists' offices in the community. In the United States, the world of insurance providers and healthcare makes access to different health providers unequal. Therefore, the types of people who can access a therapist in private practice may be very different from one that accesses mental healthcare through a community mental health provider. I was happy to be able to interview therapists in a variety of settings to better understand what they are really doing in their offices and what types of clients they are actually seeing. One therapist helped to identify a particular barrier to treatment, especially in community mental health where clients are likely to have less resources – both personal (coping skills, etc.) and financial (transportation, etc.).

> I work in community mental health, the agency that I work for is the Medicaid provider for my area. And so, we have a lot of clients who start but never finish treatment. And so a lot of them ever only get CBT, because that's as far as they get. Because before I start EMDR, I want to make sure that they can actually... they will actually follow through with treatment, because I don't want to start something, and dredge up memories, and you know, all of that, without knowing that they're going to come back next week.

This concern was echoed by others.

Another theme or barrier in community practice is how often or how well clients are completing homework from CBT sessions. One therapist said,

> My luck with homework has not been super. With my cognitive processing folks have done well with it. My others, it's kind of hit and miss. But I usually give them some try

this at home kind of piece. “Stop and notice when you're thinking this way, and can you jot a note. What else is going on? Stop and notice when you're thinking this way...” I would say I probably rarely get someone to bring that back. They'll talk sometimes about having done it, but I don't have a lot of success at getting them to bring those back.

Other Themes

Another small theme I found was that three different therapists mentioned having EMDR done on themselves before being trained in it. Two of these therapists found EMDR to be so effective that they wanted to be trained in it themselves in order to better serve their clients who are trauma survivors. One of the therapists actually had a bad experience being treated with EMDR, and actually thought “EMDR is a bunch of hooey! I don't want to touch that with a 10-foot pole!” But as they read more about the treatment and learned more about it, they realized that the therapist who had treated them had not been using the treatment correctly. The stated after looking into the research and taking the first part of EMDR training, they “decided, this is really something I believe in, and so I kind of drank the Kool-Aid, and now I'm really into it.”

EMDR Sounds “Crazy”

This idea that EMDR sounds “crazy” or like it shouldn’t work, then became a theme of its own, as several other therapists mentioned this initial feeling or reaction in themselves or in their clients. One therapist stated they “thought it sounded like voodoo or magic” when they first heard about EMDR. This therapist also looked at the research, both the research comparing EMDR to CBT, which they said “people consider the ‘gold standard’” in the trauma field, and the research on the protocol of EMDR itself, and felt that they understood why EMDR really worked. Another therapist told me something similar, stating, “I had a young colleague... who said, ‘Let's go get trained in EMDR.’ I said, ‘No. That's BS. I don't need to be a monkey and wave my fingers around.’ She said, ‘No, I think that EMDR really is something that is evidence

based.'" Over and over therapists told me that they thought the idea of EMDR sounded crazy or like it wouldn't work. But as they looked into the research, or colleagues around them were trained and brought back more information, they slowly began to change their minds. At the time of their interviews, all ten of the therapists I interviewed felt very positively about EMDR, especially as an effective treatment modality for their clients with PTSD or who have experienced traumatic events. However, they still recognize that many people will find the concept of EMDR a bit strange.

Many therapists also commented on what their clients think about EMDR. While some clients are looking for EMDR therapists, others are introduced to the idea of the treatment modality by their therapist. And while some clients are willing to try anything for relief of their symptoms, many remain at least somewhat skeptical. One therapist stated that their clients "think I'm kind of crazy... Most of them, their eyes get a little bit big when I talk about [EMDR]. Some therapists said that their clients come to them specifically for EMDR, or that clients get to them after trying other therapies that have not worked, and they are willing to try anything for some relief of their PTSD symptoms. One therapist said, "Every once in a while, I'll encounter someone who's like, 'Well that's really strange.' But usually... if someone is coming to me who's not specifically seeking EMDR, I spend a lot of time educating them about it and why it works." One therapist also thought their clients would "think it's [EMDR is] creepy or weird, but most people are really open actually. I've surprisingly found that more people than not are really receptive to the idea." Finally, one therapist noted a shift in the field of trauma and mental healthcare generally that has helped buy-in for EMDR treatment for PTSD and trauma. "I think it's becoming increasingly popular. The VA likes EMDR, so that's been helpful in getting people's buy-in, and certain insurance companies are endorsing it a little

bit more. So that makes a difference." Another therapist interview summed this trend up well, saying,

> We now have a lot more people who are actively interested [in being trained in EMDR]. I also find that EMDR is being talked about a lot more now. So EMDR itself has grown. [There are] about 8,000 [members] in the EMDR Association which is up from... it's probably doubled in the years that I've been involved. So, it's significantly bigger nationally. And I think on a local [or] state level it's bigger. So yeah, I think there are a lot more people.

Money Commitment in Training

One therapist had an interesting perspective on *why* therapists may be "misusing" treatments or trying to get one treatment to many different presenting problems or disorders. They started by saying, "All the trainings are expensive, and non-profits are – you've got to wait until the right grant comes along." This therapist worked at an agency that actively sought grants to fund therapist training. However, therapists were still trying to piece together therapies for their clients. This therapist stated:

> I really like training. I'll get trained in anything there is, but in a community setting, you don't have funds for that. There's not funds to do "CBT for Depression," and "CBT for PTSD," and "CBT for Insomnia." You take the CBT that you got in grad school and you pull out your basic textbook. And that's what you do because that's your training in CBT. And then you tweak it for whatever it is. And so, it's an interesting thing to be in a place that they say, "Okay, here are the things that CBT works for," and they've got a specialized target for that. And then they actually provide consultation to make sure that you're keeping some model fidelity.

Having EMDR therapy done as a client is expensive as well, as one therapist I interviewed acknowledged.

> And it's expensive. If you want to go and see an EMDR therapist, like if you or I wanted to go and see an EMDR therapist, the chances of finding one that takes your insurance is slim. And then, if you don't... I know one of the therapists in my office who was previously EMDR trained sees people as a private practice, charges, I want to say... it's not quite twice as much for EMDR as it is for regular talk therapy, but it's close, it's a lot more for the EMDR than it is for the individual therapy, for like the regular talk therapy.

Not only is it expensive for therapists to be trained, it’s also expensive for clients who want to access EMDR treatment. Therefore, this means that some individuals are not able to access this empirically-supported treatment.

CHAPTER 11. DISCUSSION

This study began as an inquiry into the actual use by community therapists of two empirically supported treatments (ESTs) for trauma exposure and PTSD: Cognitive Behavioral Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR). By providing insight from the practitioners' perspective, these findings provide a novel form of evidence that trauma exposure and PTSD symptoms are still very prevalent in those seeking therapy in the US. The vast majority of therapists agreed that most of their clients have experienced some type of trauma. However, the data suggest that even within highly manualized approaches, such as CBT and EMDR, there is considerable variation in the ways mental health professionals report providing therapy. Further, qualitative follow-up identified a common theme in treatment, in that most clients accessing services have actually experienced not just a single traumatic event, but multiple traumas in their lifetime. While I found that a slight majority of therapists surveyed did not use any kind of structured questionnaire or diagnostic tool to diagnose PTSD, it is clear that most therapists have decided to treat the symptoms of the clients that come to their practice, whether or not they fit into any certain diagnosis.

The current study also gave many insights into exactly who therapists are and what they are doing in their community and private practices. A 2017 study found that of those social workers who held a master's degree or higher, 85% were female, 72.6% reported that their race was White, and only 9.5% reported their ethnicity as Hispanic (Salsberg et al., 2017). Demographic information gathered in the current study showed that therapists continue to be primarily white (86.98%) women (84.07%). Participants in the current study ranged in age from 24 to 80 years old, with the mean age being 44.59 years. The 2017 study also found that by age 60 at least 33% of social workers had left the field, and by age 65 the percentage jumped to at

least 60% of social workers leaving the field (Salsberg et al., 2017). Therefore, a mean age of 44 years is also typical of therapists. Additionally, Addis and Krasnow (2000) began some work on this topic, but only surveyed licensed psychologists, almost all of which held a doctoral degree in their field. These authors called for more information about how social workers specifically, as well as other masters-level clinicians felt about empirically-supported, manualized treatment components. In the current study, the majority of therapist participants held a master's degree and the most participants also reported being social workers. This sample adds crucial information to the current body of literature on empirically-supported treatments, as well as about who therapists are and what treatment components they report utilizing in their practice.

In terms of treatment of PTSD, I also gathered information about the use of empirically-supported treatments, specifically the treatments CBT and EMDR. First, I found that only 16.31% of therapists in this survey indicated that it was "very true" that they followed a treatment manual closely. This finding is in line with previous research, such as the study by Borntrager and colleagues (2009) that even using the term "manual" gave therapists a more negative view of treatments, or Beidas and Kendall's (2010) study that showed the majority of clients do not receive an EST. Through questions about CBT and EMDR modalities specifically, I found that almost 79% of therapists who responded considered themselves trained in CBT, and 39% trained in EMDR. More interesting was the finding that therapists were using the modalities to treat a wide variety of problems and disorders.

CBT was most commonly used to treat anxiety and depression, while PTSD or trauma exposure was the third most commonly cited disorder therapists used CBT to treat. Therapists also endorsed using CBT to treat marital/relationship problems, health problems, and eating disorders. While CBT as an EST for anxiety (Butler, Chapman, Forman, & Beck, 2006;

Hofmann, Asnaani, Vonk, Sawyer, & Fang, 2012; Hofmann & Smits, 2008) and depression (Butler et al., 2006) is well established, and CBT as a treatment for the eating disorder bulimia nervosa may also be effective (Butler et al., 2006), this is an interesting findings as the efficacy of CBT for health problems (Hofmann et al., 2012), marital problems, and the eating disorder anorexia nervosa (Butler et al., 2006) is understudied and not currently a recommended treatment. Those studies that do exist show that CBT has only small to medium effect sizes in treating health problems (Hofmann et al., 2012).

Therapists in the current study endorsed using EMDR primarily for treating clients with trauma exposure or PTSD symptoms (96.3%). However, EMDR is currently only empirically-supported to treat PTSD, yet therapists also endorsed using EMDR to treat clients with all of the other disorders listed in the question including anxiety disorders, depression, addiction, marital/relationship problems, health problems, and eating disorders. At this time, EMDR is not efficacious for the treatment of depression (Carletto et al., 2017), bipolar disorder (Bedeschi, 2018), health problems (Cope, Mountford, Smith, & Agrawal, 2018; Dimitrov, Moschopoulou, & Korszun, 2019), or eating disorders (Balbo, Zaccagnino, Cussino, & Civilotti, 2017). Additionally, 22 participants, or 16% of therapists who reported being trained in EMDR, selected "other" and wrote in that they used EMDR to treat a range of other diagnoses, disorders, or problems including ADHD, dissociation, grief or loss, and dissociation. Even more interestingly, when asked if there were any disorders or problems for which it would be inappropriate to use EMDR, the most common response was that clinicians would not use EMDR to treat dissociation, while five therapists responded that EMDR should only be used to treat trauma. This provides clear evidence that therapists are using an EST, which is currently only empirically supported to treat trauma, to treat other problems and disorders for which EMDR is currently *not*

empirically supported. This should be addressed with practitioners and those creating ways to use the treatment for other diagnoses. More research, specifically randomized controlled trials, is needed before EMDR should be recommended for use with disorders other than PTSD and trauma exposure. It is clear that there is still a great deal of variation in which clients, or which diagnoses, therapists are using EMDR to treat, despite the empirical evidence, or lack thereof, for treating disorders other than PTSD with EMDR, which should be addressed.

One of the main aims of this study was to better understand what components, elements, or parts and pieces of empirically-supported treatments for PTSD were actually being used by real therapists in the field. The EST-Q was created for this purpose in this study and gave many interesting insights into how therapists are using these treatments in their practice. For example, my analyses identified the most common, and least common, treatment elements therapists are currently using in their practice. Psychoeducation about trauma and traumatic experiences as well as emotion knowledge, affect identification, and emotion regulation or modulation skills were the two most commonly used treatment elements. Deep breathing exercises or breathing training, increasing awareness of problem-solving skills and/or social skills, as well as addressing personal safety skills and assertive communication were also highly endorsed treatment components. Interestingly, explaining that the processing of trauma memories may continue after the therapy session, an element of EMDR, was the third most commonly endorsed EST element. This shows that even therapists who do not use EMDR are informing their clients that processing of trauma memories may continue after their sessions together.

While only 135 participants reported being trained in EMDR therapy, 171 and 137 therapist participants respectively reported ‘always’ using two of its central treatment components: “reevaluation – check to make sure the client’s positive results have been

maintained," and "help establish a calm/safe space in their mind to 'go' when traumatic experiences are too much." Potentially, EMDR developers may have "borrowed" these elements from CBT. However, we begin to ponder the question, how different is EMDR from CBT? In other words, are the components of the two modalities that different from each other? Interestingly, "use of guided imagery/imaginal exposure" was also a highly endorsed treatment element [*m* = 3.88; 162 participants (72.38%%) "always" or "often" use this with their clients]. Are some therapists considering EMDR to use guided imagery or imaginal exposure? According to the 10 follow-up qualitative interviews conducted, it appears that some therapists *do* consider EMDR to be the same as imaginal exposure.

As anticipated based on previous research, exposure therapy continues to be one of the most under-used elements of CBT (Farrell et al., 2013; Harned et al., 2013). Use of in-vivo exposure was the least commonly used treatment element in the current study. Other statements related to the use of exposure sessions, "I work with my clients to create a graded exposure hierarchy" and "I always work through the entire graded exposure hierarchy," were among the least endorsed treatment elements, with only 31 (8.66%) and 14 (3.90%) therapists endorsing "always" using them, respectively. This further lends credence to the idea that therapists consider EMDR to be like imaginal exposure. If so few therapists are willing to use in vivo exposure, but so many endorse using imaginal exposure, perhaps the difference can be accounted for by the type of modality used. In other words, perhaps only a small portion of those therapists trained in CBT are willing to use exposure, but therapists trained in both CBT and EMDR are willing, or consider themselves, to use imaginal exposure. It may also be the case that some therapists trained in CBT do not have formal training in exposure therapy or exposure sessions, and therefore do not feel comfortable using it with clients. Training to use exposure therapy is

extensive, and since many therapists surveyed stated that they received their training in graduate school, it is possible that they did not have extensive training, including practice, with exposure sessions. More detailed research is needed in this area to further elucidate the reasons that therapists are hesitant to use exposure sessions, even with CBT and CBT training.

Additionally, exposure sessions with CBT have been thought of as essential, however they are often not used outside of research settings (Cook et al., 2004; Foy et al., 1996). More recent research has found that using therapy without exposure sessions may not have worse outcomes for clients with PTSD. In fact, one study found that interpersonal therapy (without exposure) was not inferior to CBT with exposure sessions, and that there was less participant dropout for therapy types without exposure sessions (Markowitz et al., 2015). Participants in that study who had comorbid depression were nine times more likely to drop out of exposure therapy than to drop out of interpersonal therapy (Markowitz et al., 2015). Therefore, if client drop out is a concern for clinicians, as was indicated in the current study's qualitative data, therapists may be right that exposure sessions are more likely to have participant dropout, and that utilizing another type of therapy would be beneficial to having clients return for therapy sessions.

The EMDR treatment elements, using bilateral stimulation (e.g. eye movements, tactile or visual stimulation, etc.) for both positive cognitions and negative cognitions/traumatic events were also two of the least endorsed treatment elements. While there were fewer therapists trained in EMDR than CBT, it is still surprising to find these "essential" elements of EMDR as non-essential to a majority of EMDR-trained therapists. Indeed, at one point these components were thought to be the mechanism of change in EMDR (Engelhard, van Uijen, & van den Hout, 2010; Oren & Solomon, 2012; Propper, Pierce, Geisler, Christman, & Bellorado, 2007). Alternatively, using bilateral stimulation could also be less frequently endorsed because some clients are not

getting to the reprocessing stage of EMDR. Indeed, as some interview participants indicated, some clients may not complete bilateral stimulation due to client dropout or the client's inability to move through the stages of EMDR due to lack of coping skills. Therefore, it must be noted that lower endorsement of some items, particularly those pertaining to EMDR, may also be due to client dropout or inability to complete later stages of the treatment. While we have some qualitative evidence for this in the interview section, further research could help elucidate the reasons for lower endorsement of EST items.

To provide more meaning to the EST-Q data, I also factored the 32 items presented to therapist participants. My first hypothesis, that the CBT and EMDR items on the EST-Q would factor into at least two subscales – CBT and EMDR, was found. In fact, the items factored into four different subscales I named CBT, EMDR, Both, and Exposure. While it appears that there are some EST elements that are unique to CBT and unique to EMDR, there are also several elements of each modality that therapists use regardless of whether they consider themselves to use CBT or EMDR. That is, there are elements of therapy that are used in both CBT and EMDR treatment modalities. I expected that two items – psychoeducation about trauma and traumatic experiences and providing progressive muscle relaxation – would cross-load or load onto a third factor. In addition to these two expected item, the other items that loaded onto the "Both" subscale included some of the most endorsed treatment components (discussed above): increasing awareness of problem-solving skills and/or social skills, addressing personal safety skills and assertive communication, deep breathing exercises or breathing training, explaining that the processing of trauma memories may continue after the therapy session, working on emotion knowledge, affect identification, and emotion regulation or modulation skills, and use of guided imagery/imaginal exposure. The items on the "Both" CBT/EMDR subscale are actually

the most commonly endorsed EST items. Regardless of whether they "belong" to CBT or EMDR, they are the most commonly used elements of empirically-supported treatments for PTSD. From the qualitative data, we understand that many therapists begin with, or at least assess whether clients have, skills such as problem-solving, personal safety, assertive communication, emotion knowledge, and certainly emotion regulation skills. This data allows us to understand that therapists feel that clients cannot move onto trauma processing – whether that is through EMDR or a trauma narrative in CBT, etc. – until they are sure they have the coping skills and ability to manage facing their trauma.

Finally, a fourth subscale emerged from the EST-Q with only items that were elements of exposure therapy, or that should be used in trauma-focused CBT. This supports the previous literature that those who use CBT are hesitant to use exposure elements, even when it is empirically supported for use with trauma survivors (Cook et al., 2004). It may be that there is a small subset of therapists are willing to use exposure with their clients, or only a small subset that has formal training in exposure sessions, as past literature has also found (Foy et al., 1996; Harned et al., 2013).

I further investigated the relationships between each of the four subscales that emerged on the EST-Q, in order to provide an even better picture of current therapist practice, and again provide more meaning to the data collected in the current study. By taking mean scores of the subscales, I was able to compare and analyze differences between the scales by the type of therapist responding. First, ignoring the type of therapist the rating came from, I found that the ratings on the four EST-Q subscales significantly differed. The EMDR subscale was significantly different from all three other subscales. Additionally, when ignoring the subscale rating, I found that different types of therapists (CBT, EMDR, both, and neither) gave different

ratings. That is, therapists endorsed items on the EST-Q differently based on which type of therapist they were, or what type of training they had. However, these analyses could only provide information that there were differences between the subscales and between different types of therapists. Follow-up analyses were conducted in order to understand where or what the differences were.

An interaction indicated that the profile of ratings across different types of therapists was different for different EST-Q subscales. As predicted, EMDR therapists scored significantly higher than CBT or "Neither" therapists on the EMDR subscale, but not than therapists cross-trained in "Both" CBT and EMDR. Therefore, those therapists that were trained in EMDR only, or those trained in EMDR and CBT, endorsed using more EMDR treatment elements more often than any other type of therapist. Moreover, "Both" therapists tended to have higher scores on the EMDR subscale than CBT therapists and "Neither" therapists. This further indicated that those therapists with any training in EMDR tended to use more exclusively EMDR elements than exclusively CBT elements.

On the CBT subscale, as predicted CBT therapists reported significantly higher scores than all other types of therapists. Also as expected, therapists trained in "Both" CBT and EMDR scored higher on the CBT subscale than those therapists trained in "Neither" modality. Again, this finding means that therapists who have training in CBT were more likely to use CBT treatment elements in their practice than those therapists who did not indicate that they were trained in CBT or EMDR. There were no statistically significant differences between the types of therapists on the Both EST-Q subscale. This may be due to the type of correction used to assess the data, as one comparison was approaching significance. That is, therapists trained in "Neither" CBT or EMDR scored higher than therapists trained in "Both" CBT and EMDR on the "Both"

subscale, but the relationship was only approaching significance (p = .06). Analyses with the Exposure subscale revealed a significantly higher score for CBT therapists in contrast to "Neither" therapists. This means that therapists trained in CBT endorsed using significantly more exposure treatment elements in their practice than therapists who were not trained in CBT or EMDR. Interestingly, there was not a significant difference between CBT therapists and EMDR therapists or CBT therapists and therapists trained in Both CBT and EMDR on the exposure scale. All of these results taken together indicate that there are differences in how much therapists use different types of ESTs and how much therapists use the components of ESTs based on the type of therapist they consider themselves (the type of treatment modality in which they are trained).

This study also investigated if the "Big Five" personality traits – extraversion, agreeableness, openness to experience, conscientiousness, and neuroticism – were related to counseling self-efficacy, anxiety, and use of empirically supported treatment components. As expected, I found that those with higher levels of both state and trait anxiety had lower levels of counseling self-efficacy. That is, those therapists who are more anxious have less confidence in their therapeutic skills. Also, as found in previous literature, clinicians who reported higher levels of extraversion, openness to experience, and agreeableness also had significantly lower levels of both state and trait anxiety, and therefore higher levels of counseling self-efficacy. However, extraversion was not related to any of the four EST-Q subscales, indicating that this personality characteristic was not related to selection and use of EST elements. Surprisingly, openness to experience was only related (negatively) to the Exposure subscale, indicating that therapists who were more open were actually significantly less likely to endorse using exposure treatment components. Higher levels of conscientiousness were related to more usage of EMDR

treatment components. Neuroticism was only related to the EMDR subscale, and interestingly those who rated higher on neuroticism endorsed using significantly less EMDR treatment elements. Agreeableness was related to all but one (CBT) of the four EST-Q subscales. Higher levels of agreeableness were significantly related to more EMDR and "Both" treatment components, as well as less use of exposure treatment elements.

State anxiety was not related to use of EST elements. Trait anxiety was only significantly related to therapists' use of EMDR components, such that those with higher trait anxiety were significantly less likely to endorse using EMDR treatment elements in their practice. Could it be that feelings of anxiety are causing therapists to choose more established or known therapies with their clients? Relatedly, overall counseling self-efficacy was significantly related to the EMDR and Both subscales. That is, therapists with greater overall counseling self-efficacy were also significantly more likely to endorse using EMDR and Both treatment components. Therefore, the hypothesis that therapists with higher anxiety and lower self-efficacy may be less likely to use EST components was partially supported.

Finally, I investigated whether higher levels of anxiety and lower levels of self-efficacy were related to less use of EST components. Consistent with previous literature (Friedlander et al., 1986; Larson et al., 1992), the current study also found that those with higher levels of both state and trait anxiety had significantly lower levels of counseling self-efficacy. Some previous research also suggested that therapist self-efficacy may be related to their evaluation and use of EST's (Schiele et al., 2014). However, state anxiety was not related to use of EST elements. Trait anxiety was significantly and negatively related to therapists' use of EMDR elements and was approaching (negative) significance on the "Both" CBT/EMDR subscale. That is, therapists who endorsed more trait anxiety also endorsed significantly less use of EMDR components and

less use of "Both" CBT/EMDR components. This finding indicates that those therapists who are more anxious may feel less comfortable with, and therefore less likely to use, EMDR treatment components. While some research, including the current study, has linked some therapist characteristics, such as personality characteristics and feelings of anxiety and self-efficacy, to therapist outcomes and use of EST components, more investigation is still needed.

Qualitative Data Discussion

Addis and Krasnow (2000) suggested that more information was still needed about how clinicians were using ESTs and treatment components in clinical practice. While they suggested that a few studies have begun to provide quantitative data, they also suggested there was a great need for qualitative data asking therapists directly about this topic. Gyani and colleagues (2015) also suggested that qualitative studies may be one way to bridge the gap between research and practice, by gathering more information directly from practitioners in the field. These researchers were certainly correct. The richness of the data collected from the ten interviews I conducted could not be gathered without that personal connection and ability to delve deeper into questions and meaning, and follow-up to better understand the information gleaned.

I found 28 themes in the data, both from the questions that I asked the therapist participants and some themes emerged on their own. While the amount of qualitative data gathered exceeds the space in this document, I briefly discussed some of the themes that help illuminate the quantitative data gathered as well. The themes discussed in the results above gave us insight into what kind of treatment modalities (and what parts of those modalities) therapists are utilizing, as well as how therapists are choosing what they feel is the right treatment modality for each client. All of the therapists I spoke to were influenced by looking at their work and their clients through a trauma lens, as they were trained in both CBT and EMDR, the most empirically supported treatments for trauma and PTSD. Therefore, the qualitative results may be biased due

to this lens. However, I also spoke with nine out of the ten therapists interviewed about their use of exposure sessions when treating clients with trauma exposure/PTSD and found that none of the therapists are using exposure sessions when using CBT. In fact, these therapists are really only using CBT elements in the beginning of treatment for trauma survivors, and then usually move onto using EMDR to treat trauma exposure. But with further probing I found that several of the therapists actually considered EMDR a type of imaginal exposure. As we ended up discussing EMDR in comparison to exposure sessions or therapy, I believe that some therapists and I were misunderstanding each other. The interviewees seemed to understand "exposure" as only *in vivo* exposure, however I was including imaginal exposure in my definition of exposure sessions or therapy as well. And interestingly, many EMDR therapists thought that EMDR sessions were in fact imaginal exposure. Even though clients do not have to give details of their experience (they can tell the therapist only the name of a "picture") most therapists stated that most clients do in fact tell them more about the traumatic experience, and the client should be moving through these pictures and experience in their mind. This is really describing (imaginal) exposure therapy and adds to the quantitative data collected here indicating that perhaps EMDR and exposure sessions in CBT are actually not that different from each other. However, future research could perhaps define imaginal and in vivo exposure so that participants and researchers can be sure that we are on the same page and discussing the same concepts.

Addis and Krasnow (2000) also suggest that better communication and collaboration is needed between researchers and clinicians about how the components of EST manuals are working in practice. That is, how are EST components working outside of a controlled, clinical environment? This dissertation study adds information under this suggested future direction as well. From talking more in-depth with each therapist participant, I gleaned a better understanding

of how ESTs such as CBT and EMDR are being implemented in their practice and how they feel their clients are responding to each treatment generally. Another finding based on previous research was that many practicing therapists feel that RCT's do not contain representative samples and that due to RCT exclusion criteria, clients with comorbid disorders would not be included in the research trial, but are more typical of the clients that they see in community practice (Gyani et al., 2015). Therapists in this dissertation study agreed with this and felt that research needed to do a better job of researching the types of clients that they actually see in practice.

Additionally, previous research showed that therapists felt the therapeutic alliance was the most important factor in whether or not treatment was successful (Gyani et al., 2015). Therefore, I asked each interviewee about the therapeutic alliance, and found that interviewees similarly felt that the therapeutic relationship was of the utmost importance. My study also found in the mixed-method results that most therapists interviewed stated that they rely on their clinical judgement to know what is best for clients, just as previous research suggested (Gyani et al., 2015). Finally, the perceived rigidity of empirically-supported treatment manuals, as well as clients having a choice in their own treatment were mentioned in previous research as important to therapists' decision making process on how to treat a client (Gyani et al., 2015). The current study also found this as many therapists mentioned that they make decisions based on client need, and the fact that different EST components were endorsed regardless of which type of treatment manual to which they belonged. Replication of these types of qualitative findings is an important contribution to the field, as the small sample sizes sometimes call into question the generalizability of the findings. However, my study found similar themes from therapists and confirms many of the same ideas brought up in the Gyani and colleagues study.

Challenges and Learning Experiences

One of the biggest challenges of this study was recruiting enough participants. Therapists are very busy, and their time is valuable. Asking for an hour of time for an interview is a loss of time and money when they could have been seeing a client. Even when asking for about 20 minutes of time to fill out an anonymous online survey, it was difficult to get therapists to participate. Additionally, many competing demands are placed on community therapists in particular. Not only do they need to use time productively to see clients, they must also complete paperwork and keep meticulous notes of each client session. Many are also dealing with insurance companies or Medicaid. This is also a population that is often asked to complete surveys about varying parts of their job or to help distribute survey information to colleagues. Being a member of many of the email lists and Facebook groups used to recruit participants in this study, I can confirm that I am often bombarded with requests for research and information about studies that clients or colleagues may qualify for. Therefore, they are a very difficult population to use in a study and to get a high participation rate. Future studies with this population are necessary, so surveys should continue to take into account therapists' time limitations and schedules. Perhaps gathering data at a continuing education event, or other event that therapists attend but is not taking away from time for client care, would be a good way to reach this population in the future. A more random sample of participants could also be obtained this way.

Limitations and Future Directions

Despite the strengths of this study, there are also several limitations. First, the sample consists of only those who had their email or mailing (in the case of LMFTs) address available from a state or national database. Therefore, therapists in some states may not have received information about the study and some states may be under-studied. Additionally, there was no

way to track response rate since I am unsure how many total potential participants received the study link. One reason for this limitation was due to funding. Many national lists and state databases require a fee in order to contact their membership. Some national databases cost upwards of $4,000, which was prohibitively expensive for this study. Other licensing agencies have a policy not to contact their membership from outside entities or for research purposes due to the number of requests they receive. To improve upon this limitation, in the future I would go about recruiting participants more systematically. Hopefully with additional funding, and additional ways to find participants (such as at a continuing education event, as mentioned above), a more systematic approach would be possible in the future.

Along with this, I also did not have a question in my survey that asked participants how they found out about my study. Therefore, I had no way to track which email or mailing lists were most successful and where participants were drawn from. Since some participants were recruited using social media, it is also possible that someone who did not fit the criteria of the study (i.e. not a therapist) could have taken the survey. Although it is unlikely that anyone would have spent the time to complete the survey without qualifying, this is a possible limitation. In future studies, I plan to have a question that asks participants how they heard about the study. Having permission from the IRB to track and match IP addresses to verify therapist identity may also help weed out potential problems (such as people taking the survey who are not therapists or even therapists taking the survey multiple times).

Another limitation of this study was the use of self-report measures. Since therapists tend to overestimate their clinical skills, (Parker & Waller, 2015; Walfish et al., 2012; Waller & Turner, 2016) it is possible that self-report measures of both counseling self-efficacy and use of empirically supported treatment elements may be overestimated by study participants. In the

future, to gain a more accurate picture of both a therapists' use of, and confidence in, using EST elements, an observation study may be helpful. Therapy sessions could be recorded for coding by a research assistant or observed through a two-way mirror by research staff as well. An alternative to this would be to have clients rate their clinicians on certain measures. However, we also learned from one interview participant in this study that clients are hesitant to bring up issues, criticisms, or desired changes with their therapist. To remedy this, measures could be anonymous and not returned to the therapist themselves but left for or collected by an impartial research assistant. Again, this requires additional research staff and additional funding to be able to complete the study in this way. This would also require more participation by therapists, which may be difficult to obtain.

Additionally, some study participants may have been familiar with measures, such as the personality and anxiety measures, having been trained as a psychologist who administers these and other such measures. Therefore, the results of these measures may be influenced by therapist training and previous exposure to the measure.

Since therapists tend to overestimate their clients' symptom improvement rates (Waller & Turner, 2016), it is possible that those in the interview portion of the study are overestimating the efficacy of their interventions.

In addition to fixes for the limitations mentioned above, there are several other implications for future directions from this study. In the future being able to ask clients about their perspective would also be an important addition to the literature. For example, clients would have an important perspective on their therapist as well as the therapeutic relationship and perceived effectiveness of the therapist and/or treatment modality. Additionally, clients participating in therapy would be able to tell us more about what parts and pieces of therapy they

feel are most important for them, what works well, and in which components they are reluctant to participate. Clients would also have a perspective on their therapists' personality characteristics – especially their self-efficacy and anxiety – that has not been examined in previous literature.

Another important future direction would be to observe, either by direct observation or by video tape and review, what therapists actually are doing in their offices. Recording or observing actual client sessions would give us a better picture of what components are actually being used, as self-report measures may allow therapists to overestimate how much or how often they are using EST components. A future study collaborating with community therapists in this way would be very helpful in verifying results.

Future studies with more diverse populations are always needed in psychological research. From more diversity in the therapist sample, to more diversity in a client sample, diverse populations should be sought in any future studies. It appears that the evidence for what white female therapists are doing is growing, but we know less about therapists in the US who are not white and do not identify as female. Additionally, this study did not collect any information about the clients that these therapists served. However, since therapists in private practice appear to have responded more frequently, it is less likely that a diverse sample of clients would be represented by these therapists, as private practice often means out of pocket pay or only certain types of insurance being accepted. Diversity among client characteristics such as race, ethnicity, gender, and socioeconomic status is important. Parts and pieces of therapy may work differently for different people, and personal characteristics may play an important role in identifying these mediators and moderators of treatment. For example, some therapists commented that CBT would be too confrontational for clients with certain characteristics such as

"African American, Asian, and elderly clients." Therefore, studies with these specific populations would help both researchers and practitioners understand what type of therapy would best for them. Also, in order to access therapists and clients in more diverse treatment areas, such as true community practice settings in non-profits or low-income neighborhoods, specific recruitment and other procedures would be important to consider. For example, providing financial or time compensation for therapists to fill out surveys during work hours, or perhaps accessing therapists at specific continuing education or mandated trainings would be helpful.

Finally, I hope that other researchers will continue to reach out and partner with clinicians so that we can have a better understanding of each other. I also hope that clinicians will continue to, or begin to, partner with researchers, as we all work towards the common goal of treating those seeking therapy, especially those who have experienced trauma. Being able to find a way to (briefly) disseminate research findings to busy practitioners would be one important goal to forging these partnerships. Empowering clinicians to collect their own data about how their clients are improving (or not) in therapy could also be an important way to bridge the gaps between research and practice.

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APPENDIX A: CHAPTERS OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION AND NATIONAL ASSOCIATION OF SOCIAL WORKERS CONTACTED TO PARTICIPATE IN THE STUDY SURVEY

Table A1. *State/Provincial/City Chapters of the American Psychological Association and National Association of Social Workers Contacted to Participate in the Study Survey, Their Response, and Distribution Method(s), If Applicable*

State	APA	NASW	State	APA	NASW
Alabama	X	X	Montana	N	X
Alaska	X	N	Nebraska	N	X
Arizona	X	N	Nevada	N	X
Arkansas	X	X	New Hampshire	Y	Y – newsletter
California	N	X	New Jersey	N – fee involved	X
Colorado	Y – email	N	New Mexico	X	X
Connecticut	X	Y – email	New York City	N/A	X
Delaware	Y	X	New York State	X	X
DC	Y – email	X	North Carolina	X	X
Florida	N	N	North Dakota	Y – email	X
Georgia	N	X	Ohio	Y – email	Y – email newsletter
Guam	N/A	X	Oklahoma	N	X
Hawaii	X	X	Oregon	Y – listserv	Y – social media/website
Idaho	N	Y – social media	Pennsylvania	N	X
Illinois	N	X	Rhode Island	X	N
Indiana	N	N	South Carolina	X	Y – Facebook
Iowa	Y – email/ newsletter	Y – email	South Dakota	X	X
Kansas	Y – email	X	Tennessee	Y – website	X
Kentucky	X	Y – Facebook	Texas	Y – email	X
Louisiana	X	Y – website and Facebook	Utah	X	X
Maine	Y – email	X	Vermont	Y – listserv	X
Maryland	N	X	Virgin Islands	n/a	X
Massachusetts	X	X	Virginia	N	X
Michigan	X	N – must purchase listserv	Washington state	Y – email	X
Minnesota	Y	N	West Virginia	X	X
Mississippi	N	N – fee involved	Wisconsin	X	Y – email
Missouri	X	N – fee involved	Wyoming	Y – email	Y – social media

Table A1. *Continued*

Province	APA	NASW
Alberta	Yes – website	n/a
Manitoba	No – fee involved	n/a
Nova Scotia	Yes – email	n/a
Ontario	X	n/a
Québec	X	n/a
British Columbia	X	n/a

Note. X denotes that the state chapter gave no response to the two email contacts from the study author. N/A denotes that such a chapter does not exist in that organization. APA = American Psychological Association. NASW = National Association of Social Workers

APPENDIX B. REGIONAL CHAPTERS OF THE EMDR INTERNATIONAL ASSOCIATION CONTACTED TO PARTICIPATE IN THE STUDY SURVEY

Table B1. *Regional Chapters of the EMDR International Association Contacted to Participate in the Study Survey, Their Response, and Distribution Methods, If Applicable.*

EMDRIA Regional Chapter	Response
North Alabama	X
South Alabama	No listserv exists; sent to members and colleagues
Alaska	X
Central and Northern Arizona	X
Southern Arizona	Not able to contact – email returned
Arkansas	X
California Central Valley	Yes – email
Chico California	Yes – email
Greater Sacramento	Yes – Facebook and email
Los Angeles County	No
Northern California	X
San Diego County	X
San Francisco/South Bay	No
Santa Cruz County	X
Santa Maria California	X
Southern California	X
Superior Northern California	X
Boulder	Yes – Facebook
Denver	X
Northern Colorado	No to listserv; passed onto people they knew
Pikes Peak	Facebook group; ELN posted twice
Western Colorado	X
Fairfield County/Southwestern CT	X
New Haven	No – steering committee said too many survey questions were not about EMDR
Northern Connecticut	X
Northwest CT	X
Greater Orlando	Yes – Facebook
Northwest Florida	No email contact information
Southeast Florida	Yes – email
Tampa Bay	X
Georgia	X

Table B1. *Continued.*

EMDRIA Regional Chapter	Response
Eastern Oregon and Idaho	X
Chicago	Yes – email
Greater Louisville	Yes – Facebook
Indianapolis	X
NE/Northern Indiana	Yes – Facebook
Central Iowa	No – group is not currently active
Northwest Iowa	Yes – email
Greater Kansas City	X
Southcentral Kansas	X
South Louisiana	Yes – Facebook
Southern Maine	Yes – email
Greater Baltimore-Washington	X
Tri-State (MD, DE, PA)	No formal organization; will send to 35 people they know
Berkshire County MA	X
Boston/West Suburban	No
Greater Boston	Yes – email
Western Mass	X
Michigan and Northwest Ohio	No
Michigan	X
Minnesota	No – organization is too new
Mississippi	X
Tennessee and Northern Mississippi	X
Central Missouri	No – organization is too new
Lake of the Ozarks	X
St. Louis	Yes – Yahoo group and email
Nebraska-Great Plains	Yes – Facebook
Southeast Nebraska	Yes – email
Northern Nevada	X
Southern Nevada	X
New Jersey	X
New Mexico	X
Central New York	X
Long Island	No

Table B1. *Continued*

EMDRIA Regional Chapter	Response
New York City	X
Westchester County NY	X
Western New York	Yes – email
Asheville NC	X
Greater Charlotte Area	X
North Carolina	No
Western North Carolina	X
North Dakota	X
Greater Cincinnati	Yes – email
Greater Cleveland	X
Mid-Ohio	No email contact information
Northeast Ohio	X
Northwest Ohio	X
Oklahoma	X
Central Oregon	Yes – email
Portland	Yes – email
Southern Oregon	X
Central Pennsylvania	No
Montgomery-Bucks County	Did not contact
Philadelphia	X
Rhode Island	X
South Dakota	Yes – website
East Tennessee	No
Middle Tennessee	X
Big Country	X
Central Texas	X
DFW West/Metroplex East	Yes – email and Facebook groups
Far West Texas	X
Greater Houston Area	No listserv
Heart of Texas	No
South Texas	Yes – email
Southern Utah	Yes – email
Tri-County Area Utah	X
Utah	No email contact information
Vermont	No

Table B1. *Continued*

EMDRIA Regional Chapter	Response
Central Virginia	X
Northern Virginia	No
Rappahannock Area	X
Central Washington	X
Eastern Washington	X
NW Washington	No
SW Washington	X
Wisconsin	No listserv
Wyoming	X

Note: X denotes that the state chapter gave no response to the two email contacts from the study author. EMDRIA = Eye Movement Desensitization and Reprocessing International Association

APPENDIX C. PARTICIPANT REPORT OF STATE(S) IN WHICH THEY ARE LICENSED

Table C1. *Participant Report of State(s) of Licensure.*

Chapter	*n*	%	Chapter	*n*	%
Alabama	1	0.28%	**Oregon**	10	2.75%
Alaska	0	-	**Pennsylvania**	15	4.13%
Arizona	4	1.53%	**Puerto Rico**	0	-
Arkansas	1	0.28%	**Rhode Island**	0	-
California	17	4.68%	**South Carolina**	4	1.53%
Colorado	16	4.41%	**South Dakota**	0	-
Connecticut	8	2.20%	**Tennessee**	3	0.83%
Delaware	1	0.28%	**Texas**	22	6.06%
DC	6	1.65%	**Utah**	9	2.48%
Florida	6	1.65%	**US Virgin Islands**	0	-
Georgia	3	0.83%	**Vermont**	1	0.28%
Hawaii	2	0.55%	**Virginia**	13	3.58%
Idaho	0	-	**Washington**	3	0.83%
Illinois	13	3.58%	**West Virginia**	0	-
Indiana	4	1.53%	**Wisconsin**	16	4.41%
Iowa	67	18.46%	**Wyoming**	1	0.28%
Kansas	4	1.53%	**TOTAL**	363	
Kentucky	0	-			
Louisiana	11	3.03%			
Maine	1	0.28%	**OUTSIDE US TOTAL**	10	
Maryland	6	1.65%	**Canada**	2	20%
Massachusetts	10	2.75%	**Alberta**	0	-
Michigan	6	1.65%	**Manitoba**	0	-
Minnesota	8	2.20%	**Nova Scotia**	2	20%
Mississippi	0	-	**Ontario**	1	10%
Missouri	5	1.38%	**Québec**	0	-
Montana	3	0.83%	**British Columbia**	0	-
Nebraska	6	1.65%	**OTHER**		
Nevada	0	-	**Italy**	1	10%
New Hampshire	0	-	**Netherlands**	1	10%
New Jersey	3	0.83%	**missing**	3	30%
New Mexico	1	0.28%			
New York	25	6.89%			
North Carolina	5	1.38%			
North Dakota	3	0.83%			
Ohio	17	4.68%			
Oklahoma	3	0.83%			

Note: Participants may be licensed in more than one state (/jurisdiction).

APPENDIX D. THERAPISTS' EXPERIENCES WITH EMPIRICALLY-SUPPORTED TREATMENT QUESTIONNAIRE (EST-Q)

Table D1. *Therapists' Experiences with Empirically-Supported Treatment Questionnaire (EST-Q)*

Thinking only about your clients who are in treatment for **PTSD symptoms or trauma exposure**, please consider the components of **Empirically-Supported Treatments** listed below. Please check how often in your practice you use each component with **survivors of trauma**.

	Never (0) (I never use this with any of my clients)	Rarely (1) (I rarely use this with my clients)	Sometimes (2) (I sometimes use this with some of my clients)	Often (3) (I often use this with my clients)	Always (4) (I always use this with all of my clients)
Use of a standard measure prior to session to assess client's level of symptoms for the day's session	0	1	2	3	4
Identify processing targets from positive and negative events in client's life (i.e. first or worst traumatic event)	0	1	2	3	4
Agenda setting – articulate & implement a specific agenda for session, identify other issues	0	1	2	3	4
Have the client imagine a container to hold memories/thoughts when not working through them	0	1	2	3	4
Review with client previous homework – praise efforts and troubleshoot obstacles	0	1	2	3	4
Provide client an explanation of Eye Movement Desensitization and Reprocessing	0	1	2	3	4
Psychoeducation – provide the client information about traumatic experiences, trauma reactions, symptoms, and trauma reminders	0	1	2	3	4

Table D1. *Continued.*

Utilize homework and other educational materials – informational handouts, worksheets, etc. with client	0	1	2	3	4
Help client establish a calm/safe place in their mind to "go" when traumatic memories are too much	0	1	2	3	4
Establish a stop signal for when traumatic memories are too much to continue processing/end of session	0	1	2	3	4
Deep breathing exercises or breathing training	0	1	2	3	4
Use of guided imagery/imaginal exposure	0	1	2	3	4
Provide progressive muscle relaxation (or provide other progressive relaxation skills)	0	1	2	3	4
Have client do body scan (i.e. "Where do you feel the trauma in your body?")	0	1	2	3	4
Work on emotion knowledge/affect identification and emotion regulation/modulation skills	0	1	2	3	4
Elicit image of the traumatic event, negative belief currently held, desired positive belief, current emotion(s), and physical sensation (body location)	0	1	2	3	4

Table D1. *Continued.*

Use of cognitive restructuring with client (thought-feeling model, connect negative feelings to thoughts, challenge thoughts, generate alternative thought, practice alternative thoughts)	0	1	2	3	4
Assign thought record or daily diary to client (Client to record thoughts, feelings/emotions, behaviors/actions)	0	1	2	3	4
Use of Validity of Positive Cognition ("VOC") "How true do those words ____feel to you now?"	0	1	2	3	4
Use of Subjective Units of Disturbance Scale ("SUDS") "How disturbing does it feel to you now?"	0	1	2	3	4
Bilateral stimulation with negative cognition and traumatic event (e.g. eye movements, tactile or visual stimulation, etc.)	0	1	2	3	4
Bilateral stimulation with positive cognition (e.g. eye movements, tactile or visual stimulation, etc.)	0	1	2	3	4
Help client develop a trauma narrative	0	1	2	3	4
Use "Cognitive Interweave" to open blocked processing by elicitation of more adaptive information	0	1	2	3	4
I work with my clients to create a graded exposure hierarchy.	0	1	2	3	4

Table D1. *Continued.*

I always work through the entire graded exposure hierarchy.	0	1	2	3	4
Use of in-vivo exposure	0	1	2	3	4
Address personal safety skills and assertive communication	0	1	2	3	4
Increase awareness of problem-solving skills and/or social skills	0	1	2	3	4
Use of homework assigning (e.g. develop homework assignment, collaborate with client, make specific plan, troubleshoot obstacles)	0	1	2	3	4
Explain that processing of trauma memories may continue after the session	0	1	2	3	4
Reevaluation – Check to make sure the client's positive results have been maintained	0	1	2	3	4

APPENDIX E. FREQUENCY TABLES OF EST-Q ITEMS SEPARATED BY THOSE THERAPISTS TRAINED IN CBT AND THOSE THERAPISTS TRAINED IN EMDR

Table E1. *Frequency Table of EST-Q Items for Those Therapists Trained in CBT – Essential EMDR and CBT Elements Presented to CBT Trained Therapists*

			Frequency				
	M (*SD*)	*n*	Never	Rarely	Sometimes	Often	Always
Psychoeducation – provide the client information about traumatic experiences, trauma reactions, symptoms, and trauma reminders	4.69 (0.59)	272	0	2	12	54	204
Work on emotion knowledge/affect identification and emotion regulation/modulation skills	4.46 (0.69)	272	0	4	18	98	152
Deep breathing exercises or breathing training	4.42 (0.78)	272	2	4	26	86	154
Explain that processing of trauma memories may continue after the session	4.41 (0.85)	272	4	8	18	85	157
Address personal safety skills and assertive communication	4.27 (0.80)	271	1	7	32	110	121
Increase awareness of problem-solving skills and/or social skills	4.25 (0.83)	270	1	8	37	100	124
Reevaluation – Check to make sure the client's positive results have been maintained	4.23 (0.89)	272	5	6	36	99	126
Use of cognitive restructuring with client (thought-feeling model, connect negative feelings to thoughts, challenge thoughts, generate alternative thought, practice alternative thoughts)	4.10 (0.92)	272	3	10	54	95	110
Review with client previous homework – praise efforts and troubleshoot obstacles	4.00 (0.96)	272	7	14	42	118	91
Utilize homework and other educational materials – informational handouts, worksheets, etc. with client	3.96 (0.93)	272	4	14	57	112	85
Use of guided imagery/imaginal exposure	3.94 (0.98)	271	8	14	48	118	83

Table E1. *Continued.*

	M (*SD*)	*n*	*Frequency*				
			Never	Rarely	Sometimes	Often	Always
Help client establish a calm/safe place in their mind to "go" when traumatic memories are too much	3.89 (1.17)	272	17	19	43	91	102
Use of homework assigning (e.g. develop homework assignment, collaborate with client, make specific plan, troubleshoot obstacles)	3.81 (0.98)	271	6	20	64	110	71
Provide progressive muscle relaxation (or provide other progressive relaxation skills)	3.77 (0.93)	272	6	18	67	123	58
Have client do body scan (i.e. "Where do you feel the trauma in your body?")	3.72 (1.11)	271	13	25	63	95	75
Agenda setting – articulate & implement a specific agenda for session, identify other issues	3.69 (1.06)	272	12	22	68	105	65
Identify processing targets from positive and negative events in client's life (i.e. first or worst traumatic event)	3.69 (1.16)	271	21	17	61	99	73
Elicit image of the traumatic event, negative belief currently held, desired positive belief, current emotion(s), and physical sensation (body location)	3.62 (1.20)	271	21	26	59	93	72
Help client develop a trauma narrative	3.57 (1.10)	270	18	20	77	100	55
Establish a stop signal for when traumatic memories are too much to continue processing/end of session	3.56 (1.31)	272	29	29	57	74	83
Use of Subjective Units of Disturbance Scale ("SUDS") "How disturbing does it feel to you now?"	3.45 (1.39)	272	40	29	51	72	80
Assign thought record or daily diary to client (Client to record thoughts, feelings/emotions, behaviors/actions)	3.12 (0.98)	271	13	57	106	75	20
Use of a standard measure prior to session to assess client's level of symptoms for the day's session	2.97 (1.29)	271	45	58	65	67	36

Table E1. *Continued.*

	M (*SD*)	*n*	*Frequency*				
			Never	Rarely	Sometimes	Often	Always
Have the client imagine a container to hold memories/thoughts when not working through them	2.96 (1.42)	272	64	41	54	68	45
I work with my clients to create a graded exposure hierarchy.	2.86 (1.25)	272	53	49	77	68	25
Use of Validity of Positive Cognition ("VOC") "How true do those words ____feel to you now?"	2.86 (1.45)	272	71	48	49	57	47
Provide client an explanation of Eye Movement Desensitization and Reprocessing	2.68 (1.70)	272	119	24	22	40	67
I always work through the entire graded exposure hierarchy.	2.51 (1.17)	272	68	67	80	44	13
Use "Cognitive Interweave" to open blocked processing by elicitation of more adaptive information	2.51 (1.49)	272	114	24	48	53	33
Use of in-vivo exposure	2.40 (1.19)	272	80	72	62	47	11
Bilateral stimulation with negative cognition and traumatic event (e.g. eye movements, tactile or visual stimulation, etc.)	2.37 (1.61)	272	147	11	21	53	40
Bilateral stimulation with positive cognition (e.g. eye movements, tactile or visual stimulation, etc.)	2.32 (1.58)	354	149	12	24	50	37

Table E2. *Frequency Table of EST-Q Items for Those Therapists Trained in EMDR – Essential EMDR and CBT Elements Presented to EMDR Trained Therapists*

			Frequency				
	M (*SD*)	*n*	Never	Rarely	Sometimes	Often	Always
Psychoeducation – provide the client information about traumatic experiences, trauma reactions, symptoms, and trauma reminders	4.78 (0.48)	135	0	0	4	22	109
Explain that processing of trauma memories may continue after the session	4.67 (0.60)	135	0	2	3	32	98
Help client establish a calm/safe place in their mind to "go" when traumatic memories are too much	4.49 (0.65)	135	1	5	55	74	0
Reevaluation – Check to make sure the client's positive results have been maintained	4.47 (0.77)	135	1	2	11	39	82
Work on emotion knowledge/affect identification and emotion regulation/modulation skills	4.46 (0.78)	135	1	3	9	42	80
Provide client an explanation of Eye Movement Desensitization and Reprocessing	4.46 (0.84)	135	3	1	9	40	82
Deep breathing exercises or breathing training	4.42 (0.74)	135	1	1	11	49	73
Have client do body scan (i.e. "Where do you feel the trauma in your body?")	4.42 (0.76)	135	1	2	10	48	74
Establish a stop signal for when traumatic memories are too much to continue processing/end of session	4.32 (0.94)	135	3	3	17	37	75
Elicit image of the traumatic event, negative belief currently held, desired positive belief, current emotion(s), and physical sensation (body location)	4.27 (0.82)	135	2	1	17	54	61
Use of Subjective Units of Disturbance Scale ("SUDS") "How disturbing does it feel to you now?"	4.26 (0.92)	135	2	5	17	43	68
Address personal safety skills and assertive communication	4.19 (0.84)	135	1	4	19	55	56
Increase awareness of problem-solving skills and/or social skills	4.19 (0.85)	135	0	4	26	45	60

Table E2. *Continued.*

	M (*SD*)	*n*	*Frequency*				
			Never	Rarely	Sometimes	Often	Always
Bilateral stimulation with negative cognition and traumatic event (e.g. eye movements, tactile or visual stimulation, etc.)	4.14 (0.86)	135	3	2	17	64	49
Identify processing targets from positive and negative events in client's life (i.e. first or worst traumatic event)	4.10 (0.93)	134	3	5	18	58	50
Bilateral stimulation with positive cognition (e.g. eye movements, tactile or visual stimulation, etc.)	4.06 (0.93)	135	4	4	18	63	46
Use of Validity of Positive Cognition ("VOC") "How true do those words ____ feel to you now?"	4.05 (1.08)	135	5	9	18	45	58
Use of guided imagery/imaginal exposure	4.04 (0.93)	134	2	6	24	54	48
Have the client imagine a container to hold memories/thoughts when not working through them	4.01 (1.03)	135	6	4	22	54	49
Review with client previous homework – praise efforts and troubleshoot obstacles	3.93 (1.02)	135	5	7	23	57	43
Agenda setting – articulate & implement a specific agenda for session, identify other issues	3.84 (1.00)	135	4	9	29	56	37
Utilize homework and other educational materials – informational handouts, worksheets, etc. with client	3.74 (1.02)	135	3	10	43	42	37
Provide progressive muscle relaxation (or provide other progressive relaxation skills)	3.74 (0.86)	135	0	11	39	59	26
Use of cognitive restructuring with client (thought-feeling model, connect negative feelings to thoughts, challenge thoughts, generate alternative thought, practice alternative thoughts)	3.73 (0.93)	135	3	7	42	54	29
Use "Cognitive Interweave" to open blocked processing by elicitation of more adaptive information	3.71 (1.15)	135	10	8	29	52	36

Table E2. *Continued.*

	M (*SD*)	*n*	*Frequency*				
			Never	Rarely	Sometimes	Often	Always
Use of homework assigning (e.g. develop homework assignment, collaborate with client, make specific plan, troubleshoot obstacles)	3.47 (1.00)	135	5	15	47	48	20
Help client develop a trauma narrative	3.42 (1.08)	135	10	10	50	43	22
Use of a standard measure prior to session to assess client's level of symptoms for the day's session	2.87 (1.30)	134	25	33	25	37	14
Assign thought record or daily diary to client (Client to record thoughts, feelings/emotions, behaviors/actions)	2.78 (0.95)	135	11	42	52	26	4
I work with my clients to create a graded exposure hierarchy.	2.67 (1.24)	135	33	24	41	28	9
I always work through the entire graded exposure hierarchy.	2.39 (1.13)	135	37	36	40	17	5
Use of in-vivo exposure	2.16 (1.07)	135	46	40	35	10	4

APPENDIX F: MIXED METHOD SURVEY RESULTS

The online survey contained several qualitative questions that allowed participants to respond in their own words to certain questions. Below, I provide some common themes found in this qualitative data from the 346 participants who completed the survey.

A set of open-ended questions in the survey asked therapists about how they diagnose PTSD in their clients. As reported above, 174 participants (53.87%) answered that they did not use a structured questionnaire to diagnose PTSD in a client, while 149 participants (46.13%) said that they did. A qualitative question provided more details about how therapists were making PTSD diagnoses. Overwhelmingly, therapists reported that they were using DSM-5 criteria to diagnose PTSD in their clients (n = 120). Another common response was that therapists use "symptoms" to diagnose PTSD in their clients (*n* = 61). Thirty therapists stated that they rely on client self-report in order to make a diagnosis and six therapists stated they use the "narrative" for PTSD diagnosis. Several therapists also stated that they used an "interview" (*n* = 16) to diagnose PTSD in their clients, while eleven therapists specifically stated they used a "diagnostic interview," and thirty-eight more stated they used a "clinical interview." "Assessment" was another common response to (*n* = 24), and six therapists stated they used "intake questions," while twelve therapists stated more specifically that they used a "biopsychosocial assessment." Twenty-nine therapists stated they diagnosed PTSD when the client had a history of trauma and fourteen therapists stated they evaluated for trauma's impact on the client's life. Eleven therapists said they used a behavioral observation for PTSD diagnosis. Many therapists (n = 27) mentioned that they use a "standardized measure" to diagnose PTSD in their clients and several provided instrument names. The most commonly reported measure was the PCL-5 (*n* = 37), followed by the UCLA PTSD index (*n* = 7), CAPS (*n* = 7), ACE's (*n* = 3), MID (*n* = 2), PTSD

checklist (*n* = 3), LEC (*n* = 3), IES-R (*n* = 3), trauma symptom checklist (*n* = 3), CPSS (*n* = 2), MMPI-2 (*n* = 2), MINI neuropsychiatric interview (*n* = 2), and SCID module (n = 2). Ten therapists mentioned that they looked at collateral information, such as reviewing client records or speaking with a child client's caregiver, to make a PTSD diagnosis. Finally, three therapists said they use the client's "initial presentation" and nine different therapists stated that they used their own clinical judgement in order to make a PTSD diagnosis for their clients.

More generally, an initial survey question asked therapist participants, "How did you decide to focus on PTSD symptoms or trauma exposure in your practice?" The most common themes in the responses to this question were that all people have "some kind of trauma" or that people with PTSD symptoms just came to them. One therapist said, "99% of the clients that come through the door have some trauma. It seems negligent not to focus on the trauma and get trauma related training." Other popular themes in this question were that the therapist had always wanted to work with this population or do trauma work, that the therapist was assigned to trauma clients or that was the setting they happened to work in, trauma was part of their training or was their theoretical orientation, they did trauma work after researching it, or that they saw a need for therapists doing trauma work in their community. One therapist wrote, "In graduate school I became aware of trauma-informed clinical practices and chose to focus on this work because it asks the question, 'What happened to you?' versus, 'What's wrong with you?'" Eighteen different therapists mentioned that they were trauma survivors themselves and this is what lead them to do trauma work. Nine therapists mentioned that they found trauma work rewarding and enjoyed that they could see results from doing this type of work and four therapists said they do trauma work because they are good at it. Another common theme was the comorbidity between specific disorders, issues, or populations of focus and trauma exposure. The commonality of

trauma exposure was referenced in regards to comorbid disorders substance abuse, eating disorders, autism, OCD, conversion disorders, personality disorders, and dissociation, populations such as HIV+ or LGBT+ individuals, and issues such as grief or disrupted attachment.

Additionally, a qualitative survey question asked participants, "How do you decide to focus on PTSD symptoms or trauma exposure for a certain client?" Overwhelmingly the most popular response was that therapists decided to focus on trauma or PTSD symptoms based on the client's symptoms, symptom presentation, or current functioning (n = 78) and, relatedly, how much those problems were trauma-related and interfering with their clients' lives, such as their relationships, work/school functioning, etc. (n = 46). Many therapists also used the term "meeting the client where they're at," and discussed that the client deciding to focus on their PTSD or trauma symptoms was equally important to them. Fifty different therapists answered that they decided to focus on PTSD or trauma symptoms for a client based on their clients' goals or needs, while another 40 therapists stated that they have a trauma focus only if their client decides, prefers, and/or is willing to work on their trauma symptoms. Relatedly, 39 therapists mentioned that their focus on PTSD or trauma symptoms relied on their clients' emotional stability, coping skills, and/or readiness to process their trauma. Sixteen therapists in the survey stated that their clients came to their practice because of its focus on trauma, while eight therapists surveyed said that they do not focus on trauma and mentioned referring clients to other clinicians in this instance. Eleven different therapists mentioned that they believe trauma underlies most problems or that this is the lens through which they see their clients. Finally, eleven therapists said that they focus on trauma for a client because of their own clinical knowledge and/or training and did not mention any diagnostic tools or formal assessment.

I wanted to ask participants about supervision in this survey. In another set of qualitative questions, I asked therapist participants about supervision and found that only 39.05% (132 participants) of therapists surveyed were receiving individual supervision in their practice. Those who responded that they were receiving supervision were asked to answer a few more questions about their experience. When asked how many hours of individual supervision they received per month, the 132 therapists who responded reported receiving an average of 3.18 hours of supervision per month, though this ranged from "as needed" and six hours/year (coded as .5 hours per month for our purposes) to a therapist who responded that they received 20 hours of supervision per month.

Next, participants were asked a set of questions about their supervision on a scale from 0 to 10, where 0 indicated "not at all" and 10 indicated "very much." Results are presented in Table F1 below.

Table F1. *Quantitative Questions about Supervision*

	n	**range (0 - 10)**	**m (sd)**	**median**	**mode**
How supportive do you find your supervisor?	129	2 – 10	8.39 (2.04)	9	10
How helpful do you find your supervisor?	129	1 – 10	7.94 (2.15)	8	10
How much does your supervisor encourage you to use a manual for treating clients?	117	0 – 10	4.27 (3.04)	4	3
How much does your supervisor encourage you to use empirically-supported treatment components, such as those listed in the beginning of this questionnaire, for treating clients with PTSD symptoms or trauma exposure?	124	0 – 10	7.03 (3.04)	8	10
How much does you supervisor encourage you to use exposure sessions for treating clients with PTSD symptoms or trauma exposure?	111	0 – 10	3.84 (3.57)	3	0

When asked, "What specifically could your supervisor do for you to help you have more support in your job?" the answers varied greatly. The most common theme for this question was that supervisors were doing well and that they should continue doing what they are doing to support the therapists they supervise. Among those who were hoping for change from their

supervisor the most common theme was greater openness to evidence-based treatment. Notably, these responses may be biased by the previous questions about use of evidence-based treatments, and the nature of this specific survey. Other common themes about supervisor support were that supervisors should attend supervision sessions and be more fully present and available for their supervisees. Therapists also wanted their supervisors to provide more training for them, as well as for the supervisors to continue to receive training themselves, especially in trauma-informed care. Other specific suggestions from therapists were that they wanted their supervisors to be less judgmental, less directive, more empathetic, and provide more guidance. Several therapists were hoping their supervisors would provide more affirmations and let them know they were doing a good job. Finally, a common theme about supervisor support was that therapists needed help addressing issues that affected them personally. Whether it was addressing transference and countertransference, addressing self-care, or addressing secondary or vicarious trauma, therapists responded that they needed more support from their supervisor to deal with how their work with trauma survivors was affecting them personally.

APPENDIX G: DISSERTATION INTERVIEW QUESTIONS

First, I want to talk to you about Cognitive Behavioral Therapy, or CBT.

CBT
What made you decide to get trained in CBT?
Why do you use it in your practice?
Where did you do your training?
Did you have to complete supervised hours for your training?
Do you have any type of certification that you are trained in CBT?

What types of problems/disorders/diagnoses do you use CBT for?
Are there any problems/disorders for which you feel using CBT is inappropriate?

On average, how many sessions of CBT does your "typical" client need?

You checked that you don't use _____ (ex: exposure) for CBT. Can you tell me more about that? Why do you not use _____ (ex: exposure) when using CBT?
Does this ever change by the type of problem your client has?

Now let's talk about EMDR. First, how is (TF-)CBT different from EMDR? How would you decide which one to use with a client?

EMDR
What made you decide to get trained in EMDR?
Why do you use it in your practice?
Where did you do your training?
Did you have to complete supervised hours for your training?
Do you have any type of certification that you are trained in EMDR?

What types of problems/disorders/diagnoses do you use EMDR for?
Are there any problems/disorders for which you feel using EMDR is inappropriate?

On average, how many sessions of EMDR does your "typical" client need?

What do you think is the "mechanism of change," or reason, EMDR works? (What part of it?)

You checked that you don't use _____ (ex: exposure) for EMDR. Can you tell me more about that? Why do you not use _____ (ex: exposure) when using EMDR?
Does this ever change by the type of problem your client has?

General
I am interested in studying the way clinicians, such as yourself, use treatment manuals in (CBT/EMDR). Is there a treatment manual you use for (CBT/EMDR)? What is it?

Do you use all of the manual?

What parts do you use and why?

What would make you decide to use all of a manual (follow a complete manual)?

What could researchers do to improve treatment manuals for clinicians?

What ideas do you have for ways that researchers and clinicians could work together for the benefit of clients?

Is there anything else you think it is important for me to know?

APPENDIX H: QUALITATIVE DATA THEMES

A Priori Themes: Questions asked to the participants

1. What kind of treatment modalities do you utilize?
2. How do you choose the right treatment modality for each client?
3. Since you've been trained in EMDR, do you still use CBT as well?
4. If you use EMDR with a client, how do you start? How do you know the client is ready? How do you discuss EMDR with the client?
5. What parts of each treatment and/or manual do you use (or do you use all of it)?
    a. And in what order do you use the treatment parts/pieces? In what order to you use the manual?
6. Generally, how their clients respond to each treatment?
    a. Do you find one treatment works faster?
7. Do you use exposure sessions when treating clients with trauma exposure/PTSD?
8. What other disorders/problems do you use EMDR for (besides trauma exposure/PTSD)?
9. What disorders/problems to you NOT use EMDR to treat?
10. What do you think is the mechanism of change in EMDR?
11. How do you conduct bilateral stimulation? Do you use "buzzies"?
12. Do you have any clients that EMDR hasn't worked for?
13. How do we better study what therapists are actually doing? How do we better connect therapists and researchers?
    a. How to can researchers best share information with therapists?
14. Is there anything else you want me to know?

Emergent Themes: Additional Themes Found in the Qualitative Data

1. Therapists misusing EMDR
2. Single incident vs. complex trauma [and/or Big T (Trauma) vs. Little t (trauma)]
3. Receiving referrals from other professionals because they do EMDR
4. EMDR vs. exposure sessions/therapy
5. Had EMDR done for themselves
6. EMDR with kids
7. The therapeutic relationship
8. EMDR vs. CBT
9. Work with families and couples
10. Substance abuse/addiction
11. Trends in EMDR
12. Money commitment in EMDR
13. How do we convince organizations or legislatures for more funding and training?
14. Thought EMDR sounded crazy

APPENDIX I: SUMMARY OF REGRESSION ANALYSES PREDICTING EST-Q

Table I1. *Summary of Regression Analyses Predicting EMDR Subscale Score*

	Slope (S.E.)	*t*	Semi-partial
Years since completing degree	0.01 (0.01)	1.44	.05
Age	-0.00 (0.01)	-0.76	-.03
Gender	-0.15 (0.12)	-3.35	-.12
Type of Degree	-0.30 (0.09)	-3.35***	-.12
COSE: Microskills	0.02 (0.01)	2.10	.07
COSE: Process	-0.01 (0.01)	-1.07	-.04
COSE: Difficult Client Behaviors	0.03 (0.01)	2.66**	.09
COSE: Cultural Competence	0.01 (0.02)	0.39	.01
COSE: Values	0.01 (0.02)	0.70	.02
Trait Anxiety	-0.00 (0.01)	-0.07	-.00
State Anxiety	0.01 (0.01)	1.36	.05
EMDR Trained Therapist	1.79 (0.16)	11.36***	.40
Both Trained Therapist	1.70 (0.09)	18.88***	.66
Neither Trained Therapist	-0.32 (0.16)	-2.04*	-.07
Extraversion	0.01 (0.01)	0.74	.03
Agreeableness	-0.00 (0.01)	-0.32	-.01
Conscientiousness	-0.01 (0.01)	-1.51	-.05
Neuroticism	-0.01 (0.01)	-0.57	-.02
Openness	.00 (.01)	0.28	.01

*$p < .05$. **$p < .01$. ***$p < .001$.

Note. EST-Q = Therapists' Experiences with Empirically Supported Treatments Questionnaire. EMDR = Eye Movement Desensitization and Reprocessing

Table I2. *Summary of Regression Analyses Predicting CBT Subscale Score*

	Slope (S.E.)	*t*	Semi-partial
Years since completing degree	-0.01 (0.01)	-2.20	-.13
Age	0.01 (0.01)	1.90	.12
Gender	-0.38 (0.13)	-2.94*	-.18
Type of Degree	-0.07 (0.10)	-0.67	-.04
COSE: Microskills	0.01 (0.01)	1.39	.08
COSE: Process	-0.00 (0.01)	-0.38	-.02
COSE: Difficult Client Behaviors	0.02 (0.01)	1.55**	.09
COSE: Cultural Competence	0.01 (0.02)	0.56	.03
COSE: Values	0.00 (0.02)	0.14	.01
Trait Anxiety	-0.01 (0.01)	-1.04	-.06
State Anxiety	0.01 (0.01)	0.92	.06
EMDR Trained Therapist	-0.35 (0.17)	-2.00	-.12
Both Trained Therapist	-0.22 (0.10)	-2.25	-.14
Neither Trained Therapist	-0.89 (0.18)	-4.91**	-.30
Extraversion	0.01 (0.01)	0.80	.05
Agreeableness	-0.01 (0.01)	-0.57	-.03
Conscientiousness	-0.01 (0.01)	-1.21	-.07
Neuroticism	-0.02 (0.01)	-1.61	-.10
Openness	-0.02 (0.01)	-1.61	-.10

*$p < .05$. **$p < .01$.

Note. EST-Q = Therapists' Experiences with Empirically Supported Treatments Questionnaire. CBT = Cognitive Behavioral Therapy

Table I3. *Summary of Regression Analyses Predicting Both Subscale Score*

	Slope (S.E.)	*t*	Semi-partial
Years since completing degree	0.01 (0.01)	1.18	.07
Age	-0.01 (0.01)	-1.35	-.08
Gender	-0.25 (0.10)	-2.48**	-.15
Type of Degree	-0.10 (0.08)	-1.37	-.08
COSE: Microskills	-0.00 (0.01)	-0.36	-.08
COSE: Process	-0.01 (0.01)	-1.21	-.07
COSE: Difficult Client Behaviors	0.02 (0.01)	2.76**	.17
COSE: Cultural Competence	0.02 (0.01)	1.48	.09
COSE: Values	0.01 (0.01)	0.91	.06
Trait Anxiety	-0.00 (0.01)	-0.42	-.03
State Anxiety	0.00 (0.01)	0.21	.01
EMDR Trained Therapist	-0.08 (0.14)	-0.60	-.04
Both Trained Therapist	0.13 (0.01)	1.63	.10
Neither Trained Therapist	-0.44 (0.14)	-3.20**	-.20
Extraversion	0.00 (0.01)	0.38	.02
Agreeableness	0.01 (0.01)	0.64	.04
Conscientiousness	-0.01 (0.01)	-0.91	-.06
Neuroticism	0.00 (0.01)	0.02	.00
Openness	-0.00 (0.01)	-0.28	-.01

**$p < .01$.

Note. EST-Q = Therapists' Experiences with Empirically Supported Treatments Questionnaire

Table I4. *Summary of Regression Analyses Predicting Exposure Subscale Score*

	Slope (S.E.)	*t*	Semi-partial
Years since completing degree	0.01 (0.01)	0.64	.04
Age	-0.01 (0.01)	-1.35	-.08
Gender	-0.28 (0.18)	-1.52	-.10
Type of Degree	0.19 (0.14)	1.38	.09
COSE: Microskills	0.01 (0.01)	0.53	.04
COSE: Process	0.00 (0.01)	0.37	.02
COSE: Difficult Client Behaviors	0.03 (0.02)	1.78	.12
COSE: Cultural Competence	0.01 (0.02)	0.36	.02
COSE: Values	-0.01 (0.03)	-0.22	-.01
Trait Anxiety	0.00 (0.02)	0.25	.02
State Anxiety	0.00 (0.01)	0.39	.03
EMDR Trained Therapist	-0.12 (0.25)	-0.49	-.03
Both Trained Therapist	-0.00 (0.14)	-0.03	-.00
Neither Trained Therapist	-0.39 (0.26)	-1.51	-.10
Extraversion	-0.00 (0.01)	-0.33	-.02
Agreeableness	-0.03 (0.02)	-1.42	-.09
Conscientiousness	-0.03 (0.01)	-1.77	-.12
Neuroticism	-0.02 (0.02)	-1.19	-.08
Openness	-0.01 (0.01)	-0.89	-.06

Note. EST-Q = Therapists' Experiences with Empirically Supported Treatments Questionnaire

APPENDIX J: IRB MEMO

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Institutional Review Board
Office for Responsible Research
Vice President for Research
2420 Lincoln Way, Suite 202
Ames, Iowa 50014
515 294-4566

Date: 6/27/2017

To: Erin L. Neill
0034 MacKay Hall

CC: Dr. Carl Weems
2330c Palmer

From: Office for Responsible Research

Title: Therapists' Experiences with CBT and EMDR Treatment

IRB ID: 17-204

Approval Date:	6/27/2017	**Date for Continuing Review:**	6/26/2019
Submission Type:	New	**Review Type:**	Expedited

The project referenced above has received approval from the Institutional Review Board (IRB) at Iowa State University according to the dates shown above. Please refer to the IRB ID number shown above in all correspondence regarding this study.

To ensure compliance with federal regulations (45 CFR 46 & 21 CFR 56), please be sure to:

- **Use only the approved study materials** in your research, **including the recruitment materials and informed consent documents that have the IRB approval stamp.**
- **Retain signed informed consent documents for 3 years after the close of the study,** when documented consent is required.
- **Obtain IRB approval prior to implementing any changes** to the study by submitting a Modification Form for Non-Exempt Research or Amendment for Personnel Changes form, as necessary.
- **Immediately inform the IRB of** (1) **all serious and/or unexpected adverse experiences** involving risks to subjects or others; and (2) **any other unanticipated problems involving risks** to subjects or others.
- **Stop all research activity if IRB approval lapses,** unless continuation is necessary to prevent harm to research participants. Research activity can resume once IRB approval is reestablished.
- **Complete a new continuing review form** at least three to four weeks prior to the **date for continuing review** as noted above to provide sufficient time for the IRB to review and approve continuation of the study. We will send a courtesy reminder as this date approaches.

Please be aware that IRB approval means that you have met the requirements of federal regulations and ISU policies governing human subjects research. **Approval from other entities may also be needed.** For example, access to data from private records (e.g. student, medical, or employment records, etc.) that are protected by FERPA, HIPAA, or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, other colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the institution(s) as required by their policies. **IRB approval in no way implies or guarantees that permission from these other entities will be granted.**

Upon completion of the project, please submit a Project Closure Form to the Office for Responsible Research, 202 Kingland, to officially close the project.

Please don't hesitate to contact us if you have questions or concerns at 515-294-4566 or IRB@iastate.edu.